

Dissemination and Implementation in Health Listserv

**** APRIL 2011****

Welcome to the **Dissemination and Implementation in Health Listserv**. The purpose of the listserv is to distribute information on late-breaking (*within past 30 days*) research, practice, and policy activities in the area of dissemination and implementation in medical care and public health, including publications, reports, conferences, meetings, program announcements, funding opportunities, and other various proceedings. The listserv is purposely broad in membership and scope, and encompasses the relevant areas of dissemination, implementation, capacity building, knowledge translation, scale-up/spread, quality improvement, research-to-practice, diffusion, knowledge transfer and exchange, adoption, complex interventions, implementation strategies, action research, translational research, and other related terms.

To subscribe to the listserv, send an email to listserv@listserv.uab.edu with the body of the message stating: Subscribe D-I-Health *your name*. You should receive a message from the listserv with instructions for how to complete your subscription. Archives for the listserv can be found at <http://listserv.uab.edu/D-I-Health.html>. Listserv information and archives are also posted on the Center for Health Dissemination and Implementation Research website: <http://www.research-practice.org/index.htm>

Questions and/or comments should be directed to Wynne E. Norton, PhD, Assistant Professor, School of Public Health, University of Alabama at Birmingham: wynne.norton@gmail.com.

A. WEBINARS

ACMHA Series on Health Reform Comparative Effectiveness Research - April 13, 2011

ACMHA's critical issue webinar series hosted by President Ron Manderscheid, continues on **April 13 at 3:00 p.m. EDT/12:00 p.m. PDT** with **Comparative Effectiveness Research** presented by Kenneth B. Wells, MD, MPH, UCLA Health Services Research Center. The series is focused on the health reform legislation and what it means for behavioral health. Through sponsorship by the Substance Abuse and Mental Health Services Administration, the series is open to all interested individuals at no charge. Remaining planned sessions are listed below. Each webinar is from 3:00 – 4:00 p.m. Eastern/12:00 – 1:00 p.m. Pacific. Questions may be directed to Dr. Kris Ericson in the ACMHA office (executive.director@acmha.org).

Kenneth B. Wells, MD, MPH, received his MD from UCSF and his MPH from UCLA. He is a psychiatrist, a Senior Scientist at RAND, Professor of Psychiatry and Biobehavioral Sciences at the David Geffen School of Medicine, and Professor of Health Services at the UCLA School of Public Health. He directs the Health Services Research Center of the Jane and Terry Semel Institute for Neuroscience and Human Behavior, which focuses on improving quality of care for psychiatric and neurological disorders across the lifespan. He is the Principal Investigator of the NIMH-UCLA/RAND Center for Research on Quality in Managed Care and the Robert Wood Johnson Foundation Community Partnership Initiative. He is also Co-Director of the Robert

Wood Johnson Foundation UCLA Clinical Scholars Program and Chair of the Community Health Improvement Collaborative. Dr. Wells is an elected member of the Institute of Medicine. He was the first recipient of the Young Investigator Award and also received the Distinguished Investigator Award of Academy Health. In 2006, he received the American Psychiatric Association Award for Research. His current research interests focus on community-based participatory research methods for mental health services improvement in disadvantaged communities.

To register for April 13, 2011

Comparative Effectiveness Research

access http://www.surveymonkey.com/s/HCR_041311

B. ARTICLE ABSTRACTS

1. [Health Promot Pract.](#) 2011 Mar 18. [Epub ahead of print]

Translating Research to Practice: Using the RE-AIM Framework to Examine an Evidence-Based Physical Activity Intervention in Primary School Settings.

[Austin G](#), [Bell T](#), [Caperchione C](#), [Mummery WK](#).

Abstract

Although there has been an increase in the availability of effective, evidence-based physical activity interventions in school settings during the past decade, there is a paucity of published research focusing on the translation of these effective interventions into real-world practice. The purpose of this research was to examine the translatability of an existing school-based physical activity intervention. More specifically, this research sought to identify the barriers and facilitators in adopting, implementing, and maintaining a school-based physical activity intervention using RE-AIM as a theoretical evaluation framework. It was concluded that interventions that consider issues around complexity and compatibility with the school setting are more likely to be adopted, implemented, and maintained. It was recommended that future evaluations of physical activity interventions should not be limited to testing internal validity, but should consider external validity and ecological aspects, relevant to increasing dissemination in real-world settings.

2. [BMC Int Health Hum Rights.](#) 2011 Mar 9;11 Suppl 1:S14. [Epub ahead of print]

Building partnerships towards strengthening Makerere University College of Health Sciences: a stakeholder and sustainability analysis.

[Okui O](#), [Ayebare E](#), [Chalo RN](#), [Pariyo GW](#), [Groves S](#), [Peters DH](#).

Abstract

ABSTRACT : BACKGROUND : Partnerships and networking are important for an institution of higher learning like Makerere University College of Health Sciences (MakCHS) to be competitive and sustainable. METHODS : A stakeholder and sustainability analysis of 25 key informant interviews was conducted among past, current and potential stakeholders of MakCHS to obtain their perspectives and contributions to sustainability of the College in its role to improve health outcomes. RESULTS : The College has multiple internal and external stakeholders. Stakeholders from Uganda wanted the College to use its enormous academic capacity to fulfil its vision, take initiative, and be innovative in conducting more research and

training relevant to the country's health needs. Many stakeholders felt that the initiative for collaboration currently came more from the stakeholders than the College. External stakeholders felt that MakCHS was insufficiently marketing itself and not directly engaging the private sector or Parliament. Stakeholders also identified the opportunity for MakCHS to embrace information technology in research, learning and training, and many also wanted MakCHS to start leadership and management training programmes in health systems. The need for MakCHS to be more vigorous in training to enhance professionalism and ethical conduct was also identified.

DISCUSSION : As a constituent of a public university, MakCHS has relied on public funding, which has been inadequate to fulfill its mission. Broader networking, marketing to mobilize resources, and providing strong leadership and management support to inspire confidence among its current and potential stakeholders will be essential to MakCHS' further growth. MakCHS' relevance is hinged on generating research knowledge for solving the country's contemporary health problems and starting relevant programs and embracing technologies. It should share new knowledge widely through publications and other forms of dissemination. Whether institutional leadership is best in the hands of academicians or professional managers is a debatable matter.

CONCLUSIONS : This study points towards the need for MakCHS and other African public universities to build a broad network of partnerships to strengthen their operations, relevance, and sustainability. Conducting stakeholder and sustainability analyses are instructive toward this end, and have provided information and perspectives on how to make long-range informed choices for success.

3. [Implement Sci.](#) 2011 Mar 30;6(1):30. [Epub ahead of print]

A Comparative Evaluation of the Process of Developing and Implementing an Emergency Department HIV Testing Program.

[Christopoulos KA](#), [Koester K](#), [Weiser S](#), [Lane T](#), [Myers JJ](#), [Morin SF](#).

Abstract

BACKGROUND: The 2006 Centers for Disease Control and Prevention (CDC) HIV testing guidelines recommend screening for HIV infection in all health care settings, including the emergency department (ED). In urban areas with a high background prevalence of HIV, the ED has become an increasingly important site for identifying HIV infection. However, this public health policy has been operationalized using different models. We sought to describe the development and implementation of HIV testing programs in three EDs, assess factors shaping the adoption and evolution of specific program elements, and identify barriers and facilitators to testing.

METHODS: We performed a qualitative evaluation using in-depth interviews with fifteen "key informants" involved in the development and implementation of HIV testing in three urban EDs serving sizable racial/ethnic minority and socioeconomically disadvantaged populations. Testing program HIV prevalence ranged from 0.4%-3.0%.

RESULTS: Three testing models were identified, reflecting differences in the use of existing ED staff to offer and perform the test and disclose results. Factors influencing the adoption of a particular model included whether program developers were ED providers, HIV providers or both; whether programs took a targeted or non-targeted approach to patient selection; and the extent to which linkage to care was viewed as the responsibility of the ED. A common barrier was discomfort among ED providers about disclosing a positive HIV test result. Common facilitators were a commitment to underserved populations, the perception that testing was an

opportunity to re-engage previously HIV-infected patients in care, and the support and resources offered by the medical setting for HIV-infected patients.

CONCLUSIONS: ED HIV testing is occurring under a range of models that emerge from local realities and are tailored to institutional strengths to optimize implementation and overcome provider barriers.

4. [Implement Sci](#). 2011 Mar 23;6(1):27. [Epub ahead of print]

Patient- and delivery-system factors related to acceptance of HIV counseling and testing services among tuberculosis patients in South Africa: a qualitative study with community health workers and program managers.

[Heunis JC](#), [Wouters E](#), [Norton WE](#), [Engelbrecht MC](#), [Kigozi NG](#), [Sharma A](#), [Ragin C](#).

ABSTRACT:

BACKGROUND: South Africa has a high tuberculosis (TB)-human immunodeficiency virus (HIV) coinfection rate of 73%, yet only 46% of tuberculosis TB patients are tested for HIV. To date, relatively little work has focused on understanding why TB patients may not accept effective services or participate in programs that are readily available in health care delivery systems. The objective of the study was to explore barriers to and facilitators of participation in HIV counseling and testing (HCT) among TB patients in the Free State Province, from the perspective of community health workers and program managers who offer services to patients on a daily basis. These two provider groups are positioned to alter the delivery of HCT services in order to improve patient participation and, ultimately, health outcomes.

METHODS: Group discussions and semistructured interviews were conducted with 40 lay counselors, 57 directly-observed therapy (DOT) supporters and 13 TB and HIV/acquired immune deficiency syndrome (AIDS) program managers in the Free State Province between September 2007 and March 2008. Sessions were audio-recorded, transcribed, and thematically analyzed.

RESULTS: The themes emerging from the focus group discussions and interviews included four main suggested barrier factors: (1) fear of HIV/AIDS, TB-HIV coinfection, death and stigma; (2) perceived lack of confidentiality of HIV test results; (3) staff shortages and high workload; and (4) poor infrastructure to encourage, monitor, and deliver HCT. The four main facilitating factors emerging from the group and individual interviews were (1) encouragement and motivation by health workers; (2) alleviation of health worker shortages; (3) improved HCT training of professional and lay health workers; and (4) community outreach activities.

CONCLUSIONS: Our findings provide insight into the relatively low acceptance rate of HCT services among TB patients from the perspective of two health care workforce groups that play an integral role in the delivery of effective health services and programs. Community health workers and program managers emphasized several patient- and delivery-level factors influencing acceptance of HCT services.

5. [BMC Public Health](#). 2011 Mar 15;11(1):164. [Epub ahead of print]

Mapping of health system functions to strengthen priority programs. The case of maternal health in Mexico.

[Gonzalez Block MA](#), [Rouvier M](#), [Becerril V](#), [Sesia P](#).

Abstract

ABSTRACT:

BACKGROUND: Health system strengthening is critical to ensure the integration and scaling-up of priority health promotion, disease prevention and control programs. Normative guidelines are available to address health system function imbalances while strategic and analytical frameworks address critical functions in complex systems. Tacit knowledge-based health system constructs can help identify actors' perspectives, contributing to improve strengthening strategies. Using maternal health as an example, this paper maps and analyses the health system functions that critical actors charged with formulating and delivering priority health programs consider important for their success.

METHODS: Using concept mapping qualitative and statistical methods, health system functions were mapped for different categories of actors in four high maternal mortality states of Mexico and at the federal level. Functions within each map were analyzed for consensus, classification and priority. Functions were analyzed to uncover their relations. Maps were compared to identify variance across actors and the possible effects of social context.

RESULTS: Hospital infrastructure and human resource training are the most prominent and highly prioritized functions in the maternal health system, associated to federal efforts to support emergency obstetric care. Health policy is a highly diffuse function while program development, intercultural and community participation and social networks are clearly stated although less focused and with lower priority. The importance of functions and the feasibility of strengthening them were inversely correlated. The importance of functions is less correlated between federal and state decision makers, between federal decision makers and reproductive health/local health area program officers and between state decision makers and system-wide support officers. Two sets of oppositions can be observed across functions: those that are within the health sector as opposed to located in the social context; and those that signal given structures as opposed to manageable processes.

CONCLUSIONS: Concept mapping enabled the identification of critical functions constituting adaptive maternal health systems, including aspects of social context that are seldom included in normative and analytical frameworks. Important areas of divergence across actors' perceptions were identified to target capacity strengthening efforts towards better integrated, performing health systems.

6. [Int J Epidemiol](#). 2011 Apr;40(2):520-1. Epub 2010 Dec 20.

Development and use of the Lives Saved Tool: a model to estimate the impact of scaling up proven interventions on maternal, neonatal and child mortality.

[Boschi-Pinto C](#), [Black RE](#).

7. [Glob Public Health](#). 2011 Apr;6(3):247-56.

Why reinvent the wheel? Leveraging the lessons of HIV scale-up to confront non-communicable diseases.

[Rabkin M](#), [El-Sadr WM](#).

Abstract

The dramatic scale-up of HIV services in lower-income countries has led to the development of service delivery models reflecting the specific characteristics of HIV and its treatment as well as local contexts and cultures. Given the shared barriers and challenges faced by health programmes in lower-income countries, many of the implementation approaches developed for HIV programmes have the potential to contribute to the continuity care framework needed to address non-communicable diseases (NCDs) in resource-limited settings. HIV programmes are, in fact,

the first large-scale chronic disease programmes in many countries, offering local and effective tools, models and approaches that can be replicated, adapted and expanded. As such, they might be used to 'jumpstart' the development of initiatives to provide prevention, care and treatment services for NCDs and other chronic conditions.

8. [Psychol Addict Behav](#). 2011 Mar 28. [Epub ahead of print]

Integration of treatment innovation planning and implementation: Strategic process models and organizational challenges.

[Lehman WE](#), [Simpson DD](#), [Knight DK](#), [Flynn PM](#).

Abstract

Sustained and effective use of evidence-based practices in substance abuse treatment services faces both clinical and contextual challenges. Implementation approaches are reviewed that rely on variations of plan-do-study-act (PDSA) cycles, but most emphasize conceptual identification of core components for system change strategies. A two-phase procedural approach is therefore presented based on the integration of Texas Christian University (TCU) models and related resources for improving treatment process and program change. Phase 1 focuses on the dynamics of clinical services, including stages of client recovery (cross-linked with targeted assessments and interventions), as the foundations for identifying and planning appropriate innovations to improve efficiency and effectiveness. Phase 2 shifts to the operational and organizational dynamics involved in implementing and sustaining innovations (including the stages of training, adoption, implementation, and practice). A comprehensive system of TCU assessments and interventions for client and program-level needs and functioning are summarized as well, with descriptions and guidelines for applications in practical settings. (PsycINFO Database Record (c) 2011 APA, all rights reserved).

9. [J Community Health](#). 2011 Apr;36(2):281-8.

Organizational change: a way to increase colon, breast and cervical cancer screening in primary care practices.

[Arroyave AM](#), [Penaranda EK](#), [Lewis CL](#).

Abstract

Screening tests for colon, cervical and breast cancer remain underutilized despite their proven effectiveness in reducing morbidity and mortality. Stone et al. concluded that cancer screening is most likely to improve when a health organization supports performance through organizational changes (OC) in staffing and clinical procedures. OC interventions include the use of separate clinics devoted to prevention, use of a planned care visit, designation of non-physician staff for specific prevention activities and continuous quality improvement interventions. Objectives To identify specific elements of OC interventions that increases the selected cancer screening rates. To determine to which extent practices bought into the interventions. Methods Eleven randomized controlled trials from January 1990 to June 2010 that instituted OC to increase cancer screening completion were included. Qualitative data was analyzed by using a framework to facilitate abstraction of information. For quantitative data, an outcome of measure was determined by the change in the proportion of eligible individuals receiving cancer screening services between intervention and control practices. The health prevention clinic intervention demonstrated a large increase (47%) in the proportion of completed fecal occult blood test; having a non-physician staff demonstrated an increase in mammography (18.4%); and clinical breast examination (13.7%); the planned care visit for prevention intervention increased

mammography (8.8%); continuous quality improvement interventions showed mixed results, from an increase in performance of mammography 19%, clinical breast examination (13%); Pap smear (15%) and fecal occult blood test (13%), to none or negative change in the proportion of cancer screening rates. Conclusions To increase cancer screening completion goals, OC interventions should be implemented tailored to the primary care practice style. Interventions that circumvent the physicians were more effective. We could not conclude whether or not continuous quality techniques were effective. Further research is needed to evaluate cost-effectiveness of these interventions.

10. [Health Policy](#). 2011 Apr;100(1):51-9. Epub 2010 Nov 4.

Diffusion of medical technology: The role of financing.

[Cappellaro G](#), [Ghislandi S](#), [Anessi-Pessina E](#).

Abstract

In the last decade the pace of innovation in medical technology has accelerated: hence the need to better identify and understand the real forces behind the adoption and diffusion of medical technology innovations in clinical practice. Among these forces, financial incentives may be expected to play a major role. The purpose of this paper was to assess the influence of financing mechanisms for new medical devices and correlated procedures on their diffusion. The analysis was carried out in the Italian inpatient cardiovascular area and applied to drug eluting stents over the period 2003-07. The paper's main hypothesis, that higher levels of reimbursement encourage technology diffusion, was rejected. So was the hypothesis that private hospitals may be more sensitive to tariff levels than public hospitals. A statistically significant difference was found only between hospitals that are funded on a Diagnosis-Related Groups (DRGs) basis and those that are not, with the former showing higher levels of technology diffusion. These results warn policy makers against excessive reliance on specific reimbursement fee changes as a way of steering provider behaviour.

11. [BMJ Qual Saf](#). 2011 Apr;20(4):344-50. Epub 2011 Jan 26.

Creating effective quality-improvement collaboratives: a multiple case study.

[Strating MM](#), [Nieboer AP](#), [Zuiderent-Jerak T](#), [Bal RA](#).

Abstract

Objective To explore whether differences between collaboratives with respect to type of topic, type of targets, measures (systems) are also reflected in the degree of effectiveness. Study setting 182 teams from long-term healthcare organisation developed improvement initiatives in seven quality-improvement collaboratives (QICs) focusing on patient safety and autonomy. Study design Multiple case before-after study. Data collection 75 team leaders completed a written questionnaire at the end of each QIC on achievability and degree of challenge of targets and measurability of progress. Main outcome indicators were collaborative-specific measures (such as prevalence of pressure ulcers). Principal findings The degree of effectiveness and percentage of teams realising targets varied between collaboratives. Collaboratives also varied widely in perceived measurability ($F=6.798$ and $p=0.000$) and with respect to formulating achievable targets ($F=6.566$ and $p=0.000$). The Problem Behaviour collaborative scored significantly lower than all other collaboratives on both dimensions. The collaborative on Autonomy and control scored significantly lower on measurability than the other collaboratives. Topics for which there are best practices and evidence of effective interventions do not necessarily score higher on effectiveness, measurability, achievable and challenging targets. Conclusions The effectiveness

of a QIC is associated with the efforts of programme managers to create conditions that provide insight into which changes in processes of care and in client outcomes have been made. Measurability is not an inherent property of the improvement topic. Rather, creating measurability and formulating challenging and achievable targets is one of the crucial tasks for programme managers of QICs.

12. [Health Promot Pract.](#) 2011 Mar 22. [Epub ahead of print]

Adoption Decisions and Implementation of a Community-Based Physical Activity Program: A Mixed Methods Study.

[Downey SM](#), [Wages J](#), [Jackson SF](#), [Estabrooks PA](#).

Abstract

The purpose of this study was to determine the attributes of a community physical activity (PA) program that Kansas State Research & Extension System agents considered in the adoption decision-making process (DMP) and their understanding of evidence-based program principles. Ninety-nine percent of the eligible agents completed a survey that included quantitative and qualitative assessments of program attributes, delivery, and adaptations. The community PA program's effectiveness, compatibility within the system, high reach, and ease of delivery most influenced the DMP. Success in other counties was also indicated as influential in the DMP by those who decided to deliver the program after its initial year. Concepts of group dynamics were accurately identified and adaptations were consistent with these principles. The results indicate that agents consider multiple factors during the adoption DMP for a PA program and are able to articulate and propose adaptations that align with the evidence-based principles.

13. [Pediatrics.](#) 2011 Mar 21. [Epub ahead of print]

Legal, Ethical, and Financial Dilemmas in Electronic Health Record Adoption and Use.

[Sittig DF](#), [Singh H](#).

Abstract

Electronic health records (EHRs) facilitate several innovations capable of reforming health care. Despite their promise, many currently unanswered legal, ethical, and financial questions threaten the widespread adoption and use of EHRs. Key legal dilemmas that must be addressed in the near-term pertain to the extent of clinicians' responsibilities for reviewing the entire computer-accessible clinical synopsis from multiple clinicians and institutions, the liabilities posed by overriding clinical decision support warnings and alerts, and mechanisms for clinicians to publically report potential EHR safety issues. Ethical dilemmas that need additional discussion relate to opt-out provisions that exclude patients from electronic record storage, sale of deidentified patient data by EHR vendors, adolescent control of access to their data, and use of electronic data repositories to redesign the nation's health care delivery and payment mechanisms on the basis of statistical analyses. Finally, one overwhelming financial question is who should pay for EHR implementation because most users and current owners of these systems will not receive the majority of benefits. The authors recommend that key stakeholders begin discussing these issues in a national forum. These actions can help identify and prioritize solutions to the key legal, ethical, and financial dilemmas discussed, so that widespread, safe, effective, interoperable EHRs can help transform health care.

14. [Health Promot Int.](#) 2011 Mar 11. [Epub ahead of print]

Applying the RE-AIM framework to evaluate two implementation strategies used to introduce a tool for lifestyle intervention in Swedish primary health care.

[Carlford S](#), [Andersson A](#), [Bendtsen P](#), [Nilsen P](#), [Lindberg M](#).

Abstract

The aim of this study was to evaluate two implementation strategies for the introduction of a lifestyle intervention tool in primary health care (PHC), applying the RE-AIM framework to assess outcome. A computer-based tool for lifestyle intervention was introduced in PHC. A theory-based, explicit, implementation strategy was used at three centers, and an implicit strategy with a minimum of implementation efforts at three others. After 9 months a questionnaire was sent to staff members (n= 159) and data from a test database and county council registers were collected. The RE-AIM framework was applied to evaluate outcome in terms of reach, effectiveness, adoption and implementation. The response rate for the questionnaire was 73%. Significant differences in outcome were found between the strategies regarding reach, effectiveness and adoption, in favor of the explicit implementation strategy. Regarding the dimension implementation, no differences were found according to the implementation strategy. A theory-based implementation strategy including a testing period before using a new tool in daily practice seemed to be more successful than a strategy in which the tool was introduced and immediately used for patients.

15. [Med Decis Making](#). 2011 Mar 10. [Epub ahead of print]

Addressing Adoption and Research Design Decisions Simultaneously: The Role of Value of Sample Information Analysis.

[McKenna C](#), [Claxton K](#).

Abstract

METHODS: to estimate the cost-effectiveness of technologies are well developed with increasing experience of their application to inform adoption decisions in a timely way. However, the experience of using similarly explicit methods to inform the associated research decisions is less well developed despite appropriate methods being available with an increasing number of applications in health. The authors demonstrate that evaluation of both adoption and research decisions is feasible within typical time and resource constraints relevant to policy decisions, even in situations in which data are sparse and formal elicitation is required. In addition to demonstrating the application of expected value of sample information (EVSI) in these circumstances, the authors examine and carefully distinguish the impact that the research decision is expected to have on patients while enrolled in the trial, those not enrolled, and once the trial reports. In doing so, the authors are able to account for the range of opportunity cost associated with research and evaluate a number of **RESEARCH DESIGN:** s including length of follow-up and sample size. The authors also explore the implications for research design of conducting research while the technology is approved for widespread use and whether approval should be withheld until research reports. In doing so, the authors highlight the impact of irrecoverable opportunity costs when the initial costs of a technology are compensated only by later gains in health outcome.

16. [J Eval Clin Pract](#). 2011 Apr;17(2):311-318. doi: 10.1111/j.1365-2753.2010.01447.x.

Room for improvement? Leadership, innovation culture and uptake of quality improvement methods in general practice.

[Apekey TA](#), [McSorley G](#), [Tilling M](#), [Siriwardena AN](#).

Abstract

Background Leadership and innovation are currently seen as essential elements for the development and maintenance of high-quality care. Little is known about the relationship between leadership and culture of innovation and the extent to which quality improvement methods are used in general practice. This study aimed to assess the relationship between leadership behaviour, culture of innovation and adoption of quality improvement methods in general practice. **Method** Self-administered postal questionnaires were sent to general practitioner quality improvement leads in one county in the UK between June and December 2007. The questionnaire consisted of background information, a 12-item scale to assess leadership behaviour, a seven-dimension self-rating scale for culture of innovation and questions on current use of quality improvement tools and techniques. **Results** Sixty-three completed questionnaires (62%) were returned. Leadership behaviours were not commonly reported. Most practices reported a positive culture of innovation, featuring relationship most strongly, followed by targets and information but rated lower on other dimensions of rewards, risk and resources. There was a significant positive correlation between leadership behaviour and the culture of innovation ($r = 0.57$; $P < 0.001$). Apart from clinical audit and significant event analysis, quality improvement methods were not adopted by most participating practices. **Conclusions** Leadership behaviours were infrequently reported and this was associated with a limited culture of innovation in participating general practices. There was little use of quality improvement methods beyond clinical and significant event audit. Practices need support to enhance leadership skills, encourage innovation and develop quality improvement skills if improvements in health care are to accelerate.

17. [J Clin Nurs](#). 2011 Apr;20(7-8):1196-207. doi: 10.1111/j.1365-2702.2010.03480.x. Epub 2011 Feb 15.

The adoption, local implementation and assimilation into routine nursing practice of a national quality improvement programme: the Productive Ward in England.

[Robert G](#), [Morrow E](#), [Maben J](#), [Griffiths P](#), [Callard L](#).

Abstract

Aim and objective. To explore why innovations in service and delivery are adopted and how they are then successfully implemented and eventually assimilated into routine nursing practice. **Background.** The 'Productive Ward' is a national quality improvement programme that aims to engage nursing staff in the implementation of change at ward level. **Design.** Mixed methods (analysis of routine data, online survey, interviews) to apply an evidence-based diffusion of innovations framework. **Method.** (1) Broad and narrow indicators of the timing of 'decisions to adopt' the Productive Ward were applied. (2) An online survey explored the perceptions of 150 respondents involved with local implementation. (3) Fifty-eight interviews in five organisational case studies to explore the process of assimilation in each context. **Results.** Since the launch of the programme in May 2008 staff in approximately 85% of NHS acute hospitals had either downloaded Productive Ward materials or formally purchased a support package (as of March 2009). On a narrower measure, 40% (140) of all NHS hospitals had adopted the programme (i.e. purchased a support package) with large variation between geographical regions. Four key interactions in the diffusion of innovations framework appeared central to the rapid adoption of the programme. Despite widespread perception of significant benefits, frontline nursing staff report that more needs to be carried out to ensure that impact can be demonstrated in quantifiable terms and include patient perspectives. **Conclusions.** The programme has been rapidly adopted

by NHS hospitals in England. A variety of implementation approaches are being employed, which are likely to have implications for the successful assimilation of the programme into routine nursing practice. Relevance to clinical practice. This paper summarises the perceived benefits of the Productive Ward programme and highlights important lessons for nurse leaders who are designing (or adapting) and then implementing quality improvement programmes locally, particularly in terms of how to frame such initiatives - and provide support to - ward-level staff.

18. [Implement Sci](#). 2011 Mar 22;6(1):26. [Epub ahead of print]

How can we improve guideline use? A conceptual framework of implementability.

[Gagliardi AR](#), [Brouwers MC](#), [Palda VA](#), [Lemieux-Charles L](#), [Grimshaw JM](#).

Abstract

ABSTRACT:

BACKGROUND: Guidelines continue to be underutilized and a variety of strategies to improve their use have been suboptimal. Modifying guideline features represents an alternative, but untested way to promote their use. The purpose of this study was to identify and define features that facilitate guideline use, and examine whether and how they are included in current guidelines.

METHODS: A guideline implementability framework was developed by reviewing the implementation science literature. We then examined whether guidelines included these, or additional implementability elements. Data were extracted from publicly available high quality guidelines reflecting primary and institutional care, reviewed independently by two individuals, who through discussion resolved conflicts, then by the research team.

RESULTS: The final implementability framework included 22 elements organized in the domains of adaptability, usability, validity, applicability, communicability, accommodation, implementation and evaluation. Data were extracted from 20 guidelines on the management of diabetes, hypertension, leg ulcer and heart failure. Most contained a large volume of graded, narrative evidence, and tables featuring complementary clinical information. Few contained additional features that could improve guideline use. These included alternate versions for different users and purposes, summaries of evidence and recommendations, information to facilitate interaction with and involvement of patients, details of resource implications, and instructions on how to locally promote and monitor guideline use. There were no consistent trends by guideline topic.

CONCLUSIONS: Numerous opportunities were identified by which guidelines could be modified to support various types of decision making by different users. New governance structures may be required to accommodate development of guidelines with these features. Further research is needed to validate the proposed framework of guideline implementability, develop methods for preparing this information, and evaluate how inclusion of this information influences guideline use.

19. [Implement Sci](#). 2011 Mar 20;6(1):24. [Epub ahead of print]

Assessing the outcomes of participatory research: protocol for identifying, selecting, appraising and synthesizing the literature for realist review.

[Jagosh J](#), [Pluye P](#), [Macaulay AC](#), [Salsberg J](#), [Henderson J](#), [Sirett E](#), [Bush PL](#), [Seller R](#), [Wong G](#), [Greenhalgh T](#), [Cargio M](#), [Herbert CP](#), [Seifer SD](#), [Green LW](#).

Abstract

BACKGROUND: Participatory Research (PR) entails the co-governance of research by academic researchers and end-users. End-users are those who are affected by issues under study (e.g., community groups or populations affected by illness), or those positioned to act on the knowledge generated by research (e.g., clinicians, community leaders, health managers, patients, and policy makers). Systematic reviews assessing the generalizable benefits of PR must address: the diversity of research topics, methods, and intervention designs that involve a PR approach; varying degrees of end-user involvement in research co-governance, both within and between projects; and the complexity of outcomes arising from long-term partnerships.

METHODS: We addressed the above mentioned challenges by adapting realist review methodology to PR assessment, specifically by developing inductively-driven identification, selection, appraisal, and synthesis procedures. This approach allowed us to address the non-uniformity and complexity of the PR literature. Each stage of the review involved two independent reviewers and followed a reproducible, systematic coding and retention process. Retained studies were completed participatory health interventions, demonstrated high levels of participation by non-academic stakeholders (i.e., excluding studies in which end-users were not involved in co-governing throughout the stages of research) and contained detailed descriptions of the participatory process and context. Retained sets are being mapped and analyzed using realist review methods.

RESULTS: The librarian-guided search string yielded 7,167 citations. A total of 594 citations were retained after the identification process. Eighty-three papers remained after selection. Principle Investigators (PIs) were contacted to solicit all companion papers. Twenty-three sets of papers (23 PR studies), comprising 276 publications, passed appraisal and are being synthesized using realist review methods.

DISCUSSION: The systematic and stage-based procedure addressed challenges to PR assessment and generated our robust understanding of complex and heterogeneous PR practices. To date, realist reviews have focussed on evaluations of relatively uniform interventions. In contrast our PR search yielded a wide diversity of partnerships and research topics. We therefore developed tools to achieve conceptual clarity on the PR field, as a beneficial precursor to our theoretically-driven synthesis using realist methods. Findings from the ongoing review will be provided in forthcoming publications.

20. [Implement Sci](#). 2011 Mar 18;6(1):23. [Epub ahead of print]

[Achieving Continuity of Care: Facilitators and Barriers in Community Mental Health Teams. Belling R, Whittock M, McLaren S, Burns T, Catty J, Rees Jones I, Rose D, Wykes T, And Social Outcomes Echo EO.](#)

Abstract

BACKGROUND: The integration of mental health and social services for people diagnosed with severe mental illness (SMI) has been a key aspect of attempts to reform mental health services in the UK and aims to minimise user and carer distress and confusion arising from service discontinuities. Community Mental Health Teams (CMHTs) are a key component of UK policy for integrated service delivery, but implementing this policy has raised considerable organisational challenges. The aim of this study was to identify and explore facilitators and barriers perceived to influence continuity of care by health and social care professionals working in and closely associated with CMHTs.

METHODS: This study employed a survey design utilising in-depth, semi-structured interviews with a proportionate, random sample of 113 health and social care professionals and

representatives of voluntary organisations. Participants worked in two NHS Mental Health Trusts in greater London within eight adult Community Mental Health Teams and their associated acute in-patient wards, six local general practices and two voluntary organisations.

RESULTS: Team leadership, decision making and experiences of teamwork support were facilitators for cross boundary and team continuity; face to face communication between teams, managers, general practitioners and the voluntary sector were facilitators for information continuity. Relational, personal and longitudinal continuity were facilitated in some local areas by workforce stability. Barriers for cross boundary and team continuity were specific leadership styles and models of decision making, blurred professional role boundaries, generic working and lack of training for role development. Barriers for relational, personal and longitudinal continuity were created by inadequate staffing levels, high caseloads and administrative duties which could limit time spent with users. Incompatibility of IT systems hindered information continuity. Flexible continuity was challenged by the increasingly complex needs of service users.

CONCLUSIONS: Substantive challenges exist in harnessing the benefits of integrated CMHT working to deliver continuity of care. Team support should be prioritised in terms of IT provision linked to a review of current models of administrative support. Investment in education and training for role development, leadership, workforce retention and skills to meet service users' complex needs are recommended.

21. [Implement Sci](#). 2011 Mar 17;6(1):22. [Epub ahead of print]

Fostering shared decision making by occupational therapists and workers involved in accidents resulting in persistent musculoskeletal disorders: A study protocol.

[Coutu MF](#), [Legare F](#), [Durand MJ](#), [Corbiere M](#), [Stacey D](#), [Loisel P](#), [Bainbridge L](#).

Abstract

ABSTRACT:

BACKGROUND: From many empirical and theoretical points of view, the implementation of shared decision making (SDM) in work rehabilitation for pain due to a musculoskeletal disorder (MSD) is justified but typically the SDM model applies to a one on one encounter between a healthcare provider and a patient and not to an interdisciplinary team. Objectives: To adapt and implement an SDM program adapted to the realities of work rehabilitation for pain associated with a MSD. More specific objectives are to adapt an SDM program applicable to existing rehabilitation programs, and to evaluate the extent of implementation of the SDM program in four rehabilitation centres.

METHOD: For objective one, we will use a mixed perspective combining a theory-based development program/intervention and a user-based perspective. The users are the occupational therapists (OTs) and clinical coordinators. The strategies for developing an SDM program will include consulting the scientific literature and group consensus with clinicians-experts. A sample of convenience of eight OTs, four clinical coordinators and four psychologists all of whom have been working full-time in MSD rehabilitation for more than two years will be recruited from four collaborating rehabilitation centres. For objective two, using the same criteria as for objective one, we will first train eight OTs in SDM. Second, using a descriptive design, the extent to which the SDM program has been implemented will be assessed through observations of the SDM process. The observation data will be triangulated with the dyadic working alliance questionnaire, and findings from a final individual interview with each OT. A total of five patients per trained OT will be recruited, for a total of 40 patients. Patients will be eligible if they

have a work-related disability for more than 12 weeks due to musculoskeletal pain and plan to start their work rehabilitation programs.

DISCUSSION: This study will be the first evaluation of the program and it is expected that improvements will be made prior to a broader-scale implementation. The ultimate aim is to improve the quality of decision making, patients' quality of life, and reduce the duration of their work-related disability by improving the services offered during the rehabilitation process.

22. [Implement Sci.](#) 2011 Mar 17;6(1):21. [Epub ahead of print]

To what extent do nurses use research in clinical practice? A systematic review.

[Squires JE](#), [Hutchinson AM](#), [Bostrom AM](#), [O'Rourke HM](#), [Cobban SJ](#), [Estabrooks CA](#).

Abstract

ABSTRACT:

BACKGROUND: In the past forty years, many gains have been made in our understanding of the concept of research utilization. While numerous studies exist on professional nurses' use of research in practice, no attempt has been made to systematically evaluate and synthesize this body of literature with respect to the extent to which nurses use research in their clinical practice. The objective of this study was to systematically identify and analyze the available evidence related to the extent to which nurses use research findings in practice.

METHODS: This study was a systematic review of published and grey literature. The search strategy included 13 online bibliographic databases: Cochrane Database of Systematic Reviews, Cochrane Central Register of Controlled Trials, MEDLINE, CINAHL, EMBASE, HAPI, Web of Science, SCOPUS, OCLC Papers First, OCLC WorldCat, ABI Inform, Sociological Abstracts, and Dissertation Abstracts. The inclusion criteria consisted of primary research reports that assess professional nurses' use of research in practice, written in the English or Scandinavian languages. Extent of research use was determined by assigning research use scores reported in each article to one of four quartiles: low, moderate-low, moderate-high, or high.

RESULTS: Following removal of duplicate citations, a total of 12,418 titles were identified through database searches, of which 133 articles were retrieved. Of the articles retrieved, 55 satisfied the inclusion criteria. The 55 final reports included cross-sectional/survey (n = 51) and quasi-experimental (n = 4) designs. A sensitivity analysis, comparing findings from all reports with those rated moderate (moderate-weak and moderate-strong) and strong quality, did not show significant differences. In a majority of the articles identified (n = 38, 69%), nurses reported moderate-high research use.

CONCLUSIONS: According to this review, nurses' reported use of research is moderate-high and has remained relatively consistent over time until the early 2000's. This finding, however, may paint an overly optimistic picture of the extent to which nurses use research in their practice given the methodological problems inherent in the majority of studies. There is a clear need for the development of standard measures of research use and robust well-designed studies examining nurses' use of research and its impact on patient outcomes. The relatively unchanged self-reports of moderate-high research use by nurses is troubling given that over 40 years have elapsed since the first studies in this review were conducted and the increasing emphasis in the past 15 years on evidence-based practice. More troubling is the absence of studies in which attempts are made to assess the effects of varying levels of research use on patient outcomes.

23. [Psychol Addict Behav.](#) 2011 Mar 28. [Epub ahead of print]

A guiding framework and approach for implementation research in substance use disorders treatment.

[Damschroder LJ](#), [Hagedorn HJ](#).

Abstract

This paper introduces readers to the concepts of implementation science, implementation theory, and implementation frameworks and models. A wide range of models has been published in the literature related to implementation. The paper will present an overview of the Consolidated Framework for Implementation Research (CFIR), which is a comprehensive typology that unifies and consolidates the array of constructs that influence implementation from the perspective of these models. The CFIR is then used to evaluate implementation models used in studies of substance use disorder (SUD) treatments. Implementation research is scarce, with few prospective studies of theory-driven implementation. We assert that future research in SUD needs to meet three overarching objectives to promote wider implementation of evidence-based practices: (a) differentiation of core versus adaptable components of evidence-based interventions need; (b) development of methods to design implementation strategies, effectively adapted to the broad context; and (c) design and testing of predictive models to assess likelihood of effective implementation and prospects for sustainability while taking into account salient contextual factors. A recommended strategy for accomplishing these objectives is described. (PsycINFO Database Record (c) 2011 APA, all rights reserved).

24. [Health Promot Pract](#). 2011 Mar 24. [Epub ahead of print]

Beyond Reach and Effectiveness: Evaluating the Not-On-Tobacco (N-O-T) Program in West Virginia From 2000 to 2005.

[Anesetti-Rothermel A](#), [Noerachmanto N](#), [Horn K](#), [Dino G](#).

Abstract

Despite most teenage smokers wanting to quit, their likelihood of success resembles that of flipping a coin. Evidence-based cessation programs, like the American Lung Association's Not-On-Tobacco (N-O-T) program, are effective. Evaluation of program dissemination is critical. This study uses the RE-AIM framework to evaluate the N-O-T program in West Virginia from 2000 to 2005. RE-AIM components consisted of four measures. Regional dissemination was measured using comparative differences between Regional Educational Service Agency regions (RESAs). Significant associations were found between RESAs for numerous characteristics. Among the RE-AIM components, two measures of Implementation were significantly different between RESAs. Variability between RESAs provided valuable descriptive evidence of N-O-T program dissemination in West Virginia. Therefore, geographical tailoring grounded in community-based participatory research could increase the N-O-T program's overall dissemination.

25. [Eval Program Plann](#). 2011 Mar 17. [Epub ahead of print]

Barriers to implementing evidence-based practices in addiction treatment programs: Comparing staff reports on Motivational Interviewing, Adolescent Community Reinforcement Approach, Assertive Community Treatment, and Cognitive-behavioral Therapy.

[Amodeo M](#), [Lundgren L](#), [Cohen A](#), [Rose D](#), [Chassler D](#), [Beltrame C](#), [D'Ippolito M](#).

Abstract

PURPOSE: This qualitative study explored barriers to implementing evidence-based practices (EBPs) in community-based addiction treatment organizations (CBOs) by comparing staff

descriptions of barriers for four EBPs: Motivational Interviewing (MI), Adolescent Community Reinforcement Approach (A-CRA), Assertive Community Treatment (ACT), and Cognitive-behavioral Therapy (CBT).

METHODS: The CBOs received CSAT/SAMHSA funding from 2003 to 2008 to deliver services using EBPs. Phone interview responses from 172 CBO staff directly involved in EBP implementation were analyzed using content analysis, a method for making inferences and developing themes from the systematic review of participant narratives (Berelson, 1952).

RESULTS: Staff described different types of barriers to implementing each EBP. For MI, the majority of barriers involved staff resistance or organizational setting. For A-CRA, the majority of barriers involved specific characteristics of the EBP or client resistance. For CBT, the majority of barriers were associated with client resistance, and for ACT, the majority of barriers were associated with resources.

DISCUSSION: EBP designers, policy makers who support EBP dissemination and funders should include explicit strategies to address such barriers. Addiction programs proposing to use specific EBPs must consider whether their programs have the organizational capacity and community capacity to meet the demands of the EBP selected.

26. [Implement Sci](#). 2011 Mar 14;6(1):20. [Epub ahead of print]

Study protocol: Addressing evidence and context to facilitate transfer and uptake of consultation recording use in oncology: A knowledge translation implementation study.

[Hack TF](#), [Ruether JD](#), [Weir LM](#), [Grenier D](#), [Degner LF](#).

Abstract

BACKGROUND: The time period from diagnosis to the end of treatment is challenging for newly diagnosed cancer patients. Patients have substantial need for information, decision aids and psychosocial support. Recordings of initial oncology consultations improve information recall, reduce anxiety, enhance patient satisfaction with communication, and increase patients' perceptions that the essential aspects of their disease and treatment have been addressed during the consultation. Despite the research evidence supporting the provision of consultation recordings, uptake of this intervention into oncology practice has been slow. The primary aim of this project is to conduct an implementation study to explicate the contextual factors, including use of evidence, that facilitate and impede the transfer and uptake of consultation recording use in a sample of patients newly diagnosed with breast or prostate cancer.

METHODS: Sixteen oncologists from cancer centres in three Canadian cities will participate in this three-phase study. The Pre-Implementation Phase will be used to identify and address those factors that are fundamental to facilitating the smooth adoption and delivery of the intervention during the Implementation Phase. During the Implementation Phase, breast and prostate cancer patients will receive a recording of their initial oncology consultation to take home. Patient interviews will be conducted in the days following the consultation to gather feedback on the benefits of the intervention. Patients will complete the Digital Recording Use Semi-Structured Interview (DRUSSI) and be invited to participate in focus groups at which their experiences with the consultation recording will be explored. Oncologists will receive a summary letter detailing the benefits voiced by their patients. The post-implementation phase includes a conceptual framework development meeting and a 7-point dissemination strategy.

DISCUSSION: Consultation recording has been used in oncology, family medicine and other medicine specialties, and despite affirming evidence and probable applications to a large number of diseases and a variety of clinical contexts, clinical adoption of this intervention has been slow.

The proposed study findings will advance our conceptual knowledge of the ways to enhance uptake of consultation recordings in oncology.

27. [Health Educ Res.](#) 2011 Apr;26(2):348-60. Epub 2011 Mar 11.

Dissemination strategies to improve implementation of the PHS smoking cessation guideline in MCH public health clinics: experimental evaluation results and contextual factors.

[Manfredi C](#), [Cho YI](#), [Warnecke R](#), [Saunders S](#), [Sullivan M](#).

Abstract

We report results from an experimental study that tested the effectiveness of dissemination interventions to improve implementation of smoking cessation guidelines in maternal and child public health clinics. We additionally examine individual clinic results for contextual explanations not apparent from the experimental findings alone. Twelve clinics in Illinois were randomized to three dissemination strategies: (i) core dissemination (provision of the 2000 Public Health System Clinical Practice Guideline and a tested smoking cessation program, including program supplies and training), (ii) core dissemination and access to telephone counseling and (iii) core dissemination, telephone counseling access and outreach visits to clinics. Implementation outcomes were post-dissemination improvements over baseline in the percent of smokers reporting receipt/exposure to (i) provider advice, (ii) self-help booklet, (iii) videos, (iv) posters and (v) an adjunct intervention. Results showed significant increases in the percent of smokers receiving a booklet (overall) and an adjunct intervention (Groups 2 and 3). There were no increases in smoker-reported provider advice or videos and poster exposure. Examination of individual clinic findings showed that seven clinics accounted for all the experimental effectiveness. Smoker-reported provider advice to quit also increased in these clinics. Type of clinic and the absence of disruptive events distinguished clinics with and without effective dissemination outcomes.

28. [Arch Dis Child Fetal Neonatal Ed.](#) 2011 Mar 10. [Epub ahead of print]

Improvement in neonatal intensive care unit care: a cluster randomised controlled trial of active dissemination of information.

[Acolet D](#), [Allen E](#), [Houston R](#), [Wilkinson AR](#), [Costeloe K](#), [Elbourne D](#).

Abstract

Background Research findings are not rapidly or fully implemented into policies and practice in care. Objectives To assess whether an 'active' strategy was more likely to lead to changes in policy and practice in preterm baby care than traditional information dissemination. Design Cluster randomised trial. Participants 180 neonatal units (87 active, 93 control) in England; clinicians from active arm units; babies born <27 weeks gestation. Control arm Dissemination of research report; slides; information about newborn care position statement. Active arm As above plus offer to become 'regional 'champion' (attend two workshops, support clinicians to implement research evidence regionally), or attend one workshop, promote implementation of research evidence locally. Main outcome measures timing of surfactant administration; admission temperature; staffing of resuscitation team present at birth. Results 48/87 Lead clinicians in the active arm attended one or both workshops. There was no evidence of difference in post-intervention policies between trial arms. Practice outcomes based on babies in the active (169) and control arms (186), in 45 and 49 neonatal units respectively, showed active arm babies were more likely to have been given surfactant on labour ward (RR=1.30; 95% CI 0.99 to 1.70); p=0.06); to have a higher temperature on admission to neonatal intensive care unit (mean

difference=0.29(o)C; 95% CI 0.22 to 0.55; p=0.03); and to have had the baby's trunk delivered into a plastic bag (RR=1.27; 95% CI 1.01 to 1.60; p=0.04) than the control group. The effect on having an 'ideal' resuscitation team at birth was in the same direction of benefit for the active arm (RR=1.18; 95% CI 0.97 to 1.43; p=0.09). The costs of the intervention were modest. Conclusions This is the first trial to evaluate methods for transferring information from neonatal research into local policies and practice in England. An active approach to research dissemination is both feasible and cost-effective. Trial registration Current controlled trials ISRCTN89683698.

29. [Health Educ Res.](#) 2011 Apr;26(2):361-71. Epub 2011 Mar 7.

Evidence-based practice in school substance use prevention: fidelity of implementation under real-world conditions.

[Ennett ST](#), [Haws S](#), [Ringwalt CL](#), [Vincus AA](#), [Hanley S](#), [Bowling JM](#), [Rohrbach LA](#).

Abstract

Fidelity of program implementation under real-world conditions is a critical issue in the dissemination of evidence-based school substance use prevention curricula. Program effects are diminished when programs are implemented with poor fidelity. We assessed five domains of fidelity-adherence, exposure (dosage), quality of delivery, participant responsiveness and program differentiation (lack of contamination from other programs)-in a subset of respondents (N = 342) from a national random sample of public schools with middle school grades (N = 1721). Respondents taught 1 of 10 evidence-based universal substance use prevention programs as their primary program during the 2004-05 school year. Their responses to survey questions about their recent implementation practices indicated that fidelity was high for quality of delivery and participant responsiveness, low for program differentiation and modest for adherence and exposure-the two core domains of fidelity. Results suggest the need for continued emphasis on fidelity in program materials, trainings and on-going technical support. Particular attention should be paid to supporting use of interactive delivery strategies.

30. [Adm Policy Ment Health.](#) 2011 Mar 6. [Epub ahead of print]

Training Research: Practical Recommendations for Maximum Impact.

[Beidas RS](#), [Koerner K](#), [Weingardt KR](#), [Kendall PC](#).

Abstract

This review offers practical recommendations regarding research on training in evidence-based practices for mental health and substance abuse treatment. When designing training research, we recommend: (a) aligning with the larger dissemination and implementation literature to consider contextual variables and clearly defining terminology, (b) critically examining the implicit assumptions underlying the stage model of psychotherapy development, (c) incorporating research methods from other disciplines that embrace the principles of formative evaluation and iterative review, and (d) thinking about how technology can be used to take training to scale throughout all stages of a training research project. An example demonstrates the implementation of these recommendations.

31. [Health Promot Pract.](#) 2011 Mar 25. [Epub ahead of print]

Evaluating the Implementation of a Hospital Work-Site Obesity Prevention Intervention: Applying the RE-AIM Framework.

[Estabrook B](#), [Zapka J](#), [Lemon SC](#).

Abstract

Step Ahead was a randomized controlled trial testing ecologically based weight gain prevention interventions in the hospital workplace. The RE-AIM framework is used to assess the intervention's Reach, Effectiveness, Adoption, Implementation, and Maintenance. Some intervention components reached a large percentage of the workforce. Although the intervention was not effective in changing BMI on a population level, a dose response was observed, in which persons who used more of the intervention components and materials were more likely to prevent weight gain. Adoption of the intervention by sites invited was 100%. Implementation of healthy eating interventions in the hospital setting was especially challenging because close collaboration was necessary with hospital employees and contractors, and their mission and priorities often were at odds with the intervention goals. There are some notable instances of intervention maintenance at the institutional level: Farmers markets have been expanded at both sites since the end of the intervention period, and new wellness programs are being adopted and implemented. Implications for practice include the translation of this research into other workplace settings.

32. [Implement Sci](#). 2011 Mar 25;6(1):28. [Epub ahead of print]

Improvement of primary care for patients with chronic heart failure: a study protocol for a cluster randomised trial comparing two strategies.

[van Lieshout J](#), [Steenkamer B](#), [Knippenberg M](#), [Wensing M](#).

ABSTRACT:

BACKGROUND: Many patients with chronic heart failure (CHF), a common condition with high morbidity and mortality rates, receive treatment in primary care. To improve the management of CHF in primary care we developed an implementation programme, comprising educational and organisational components, with support by a practice visitor and focus both on drug treatment and lifestyle advice, and on organisation of care within the practice and collaboration with other health care providers. Tailoring has been shown to improve the success of implementation programmes, but little is known about what would be best methods for tailoring, specifically with respect to CHF in primary care.

METHODS: We describe a cluster randomised controlled trial to examine the effectiveness of tailoring a CHF implementation program to general practices compared to a standardised way of delivering a programme. The study population will consist of 60 general practitioners (GPs) and the CHF patients they include. GPs are randomised in blocks of 4 stratified according to practice size. In the tailored intervention group GPs prioritise the issues that will form the bases of the support for the practice visits. The primary outcome measures are patient's experience of receiving structured primary care for CHF (PACIC, a questionnaire related to the Chronic Care Model), and patients' health-related utilities (EQ-5D). Patients being clustered in practices, multilevel regression analyses will be used to explore the effect of practice size and type of intervention programme. In addition we will examine both changes within groups and differences at follow-up between groups with respect to drug therapy and advice on lifestyle issues. Furthermore, in interviews the feasibility of the programme and goal attainment, organisational changes in CHF care, and formalised cooperation with other disciplines will be assessed.

DISCUSSION: In the tailoring of the programme we will present the GPs a list with barriers; GPs will assess relevance and possibility to solve these barriers. The list is rigorously developed and tested in various projects. The factors for ordering the barriers are related to the innovation,

the healthcare professional, the patient, and the context. CHF patients do not form a homogeneous group. Subgroup analyses will be performed based on the distinction between systolic CHF and CHF with preserved left ventricular function (diastolic CHF). Trial registration: Current Controlled Trials ISRCTN18812755.

33. [J Eval Clin Pract.](#) 2011 Mar 25. doi: 10.1111/j.1365-2753.2011.01654.x. [Epub ahead of print]

Factors determining the motivation of primary health care professionals to implement and continue the 'Beweegkuur' lifestyle intervention programme.

[Helmink JH](#), [Kremers SP](#), [van Boekel LC](#), [van Brussel-Visser FN](#), [de Vries NK](#).

Abstract

Aim To examine factors explaining motivation among health care professionals to implement and continue a multidisciplinary primary care-based lifestyle intervention, called BeweegKuur, to support prevention and treatment of type 2 diabetes mellitus. **Methods** Questionnaire research with two measurements among Dutch general practitioners, practice nurses and physiotherapists participating in a pilot study. At baseline, professionals were generally preparing to start the implementation. At second measurement, all practices were implementing BeweegKuur. **Results** The results reveal a positive motivation among professionals to implement and continue the intervention. The motivation of practice nurses to continue implementation was lower compared with other professionals. Social support by colleagues, compatibility and perceived relative advantage of the intervention for the professionals were associates of the baseline motivation to implement it. High-baseline self-efficacy and profession (i.e. not being practice nurse) positively predicted the motivation to continue the intervention at second measurement. **Conclusions** Professionals in our study can be characterized as innovators or early adopters, and inclusion of BeweegKuur in the basic health insurance package may persuade other adoption categories to implement the intervention. An intensified focus on skills building (e.g. motivational interviewing skills, general lifestyle counselling skills) is expected to contribute to sustained high-quality implementation of the intervention.

34. [BMC Health Serv Res.](#) 2011 Mar 22;11(1):61. [Epub ahead of print]

Sustainable practice change: Professionals' experiences with a multisectoral child health promotion programme in Sweden.

[Edvardsson K](#), [Garvare R](#), [Ivarsson A](#), [Eurenus E](#), [Mogren I](#), [Nystrom ME](#).

Abstract

BACKGROUND: New methods for prevention and health promotion and are constantly evolving; however, positive outcomes will only emerge if these methods are fully adopted and sustainable in practice. To date, limited attention has been given to sustainability of health promotion efforts. This study aimed to explore facilitators, barriers, and requirements for sustainability as experienced by professionals two years after finalizing the development and implementation of a multisectoral child health promotion programme in Sweden (the Salut programme). Initiated in 2005, the programme uses a 'Salutogenesis' approach to support health-promoting activities in health care, social services, and schools.

METHODS: All professionals involved in the Salut Programme's pilot areas were interviewed between May and September 2009, approximately two years after the intervention package was established and implemented. Participants (n=23) were midwives, child health nurses, dental hygienists/dental nurses, and pre-school teachers. Transcribed data underwent qualitative content

analysis to illuminate perceived facilitators, barriers, and requirements for program sustainability.

RESULTS: The programme was described as sustainable at most sites, except in child health care. The perception of facilitators, barriers, and requirements were largely shared across sectors. Facilitators included being actively involved in intervention development and small-scale testing, personal values corresponding to programme intentions, regular meetings, working close with collaborators, using manuals and a clear programme branding. Existing or potential barriers included insufficient managerial involvement and support and perceived constraints regarding time and resources. In dental health care, barriers also included conflicting incentives for performance. Many facilitators and barriers identified by participants also reflected their perceptions of more general and forthcoming requirements for program sustainability.

CONCLUSIONS: These results contribute to the knowledge of processes involved in achieving sustainability in health promotion initiatives. Facilitating factors include involving front-line professionals in intervention development and using small scale testing; however, the success of a program requires paying attention to the role of managerial support and an overall supportive system. In summary, these results emphasise the importance for both practitioners and researchers to pay attention to parallel processes at different levels in multidisciplinary improvement efforts intended to ensure sustainable practice change.

35. [Adm Policy Ment Health](#). 2011 Mar 17. [Epub ahead of print]

Easier Said than Done: Intervention Sustainability in an Urban After-School Program.

[Lyon AR](#), [Frazier SL](#), [Mehta T](#), [Atkins MS](#), [Weisbach J](#).

Abstract

Although sustainability is frequently described as a project goal in community-based programs, concentrated efforts to sustain interventions beyond the conclusion of research funding have only recently emerged as a focus of implementation research. The current paper describes a study of behavioral consultation to after-school program staff in low-SES, urban communities. Following consultation, staff use of four recommended tools and strategies was examined, emphasizing facilitators and barriers to sustainability. Results indicated high perceived utility and intention to use intervention components, but low sustainability at two follow-up time points within 1 year after the initial consultation concluded. Findings suggest that ongoing implementation support in community settings may be necessary to ensure the sustainability of interventions and meet the mental health needs of participating high-risk youth.

36. [Implement Sci](#). 2011 Mar 29;6(1):29. [Epub ahead of print]

Newborn care and knowledge translation - perceptions among primary health care staff in northern Vietnam.

[Eriksson L](#), [Nga NT](#), [Hoa DP](#), [Persson LA](#), [Ewald U](#), [Wallin L](#).

Abstract

BACKGROUND: Nearly four million neonatal deaths occur annually in the world despite existing evidence-based knowledge with the potential to prevent many of these deaths. Effective knowledge translation (KT) could help to bridge this know-do gap in global health. The aim of this study was to explore aspects of KT at the primary healthcare level in a northern province in Vietnam.

METHODS: Six focus-group discussions were conducted with primary healthcare staff members who provided neonatal care in districts that represented three types of geographical

areas existing in the province (urban, rural, and mountainous). Recordings were transcribed verbatim, translated into English, and analyzed using content analysis.

RESULTS: We identified three main categories of importance for KT. Healthcare staff used several channels for acquisition and management of knowledge (1), but none appeared to work well. Participants preferred formal training to reading guideline documents, and they expressed interest in interacting with colleagues at higher levels, which rarely happened. In some geographical areas, traditional medicine (2) seemed to compete with evidence-based practices, whereas in other areas it was a complement. Lack of resources, low frequency of deliveries and, poorly paid staff were observed barriers to keeping skills at an adequate level in the healthcare context (3).

CONCLUSIONS: This study indicates that primary healthcare staff work in a context that to some extent enables them to translate knowledge into practice. However, the established and structured healthcare system in Vietnam does constitute a base where such processes could be expected to work more effectively. To accelerate the development, thorough considerations over the current situation and carefully targeted actions are required.

37. [Implement Sci](#). 2011 Mar 22;6(1):25. [Epub ahead of print]

Protocol: developing a conceptual framework of patient mediated knowledge translation, systematic review using a realist approach.

[Gagliardi AR](#), [Legare F](#), [Brouwers MC](#), [Webster F](#), [Wiljer D](#), [Badley E](#), [Straus S](#).

Abstract

BACKGROUND: Patient involvement in health care represents the means by which to achieve a health care system that is responsive to patient needs and values. Characterization and evaluation of strategies for involving patients in their health care may benefit from a knowledge translation (KT) approach. The purpose of this knowledge synthesis is to develop a conceptual framework of patient mediated KT interventions.

METHODS: A preliminary conceptual framework of patient mediated KT interventions was compiled to describe intended purpose, recipients, delivery context, intervention and outcomes. A realist review will be conducted in consultation with stakeholders from the arthritis and cancer fields to explore how these interventions work, for whom and in what contexts. To identify patient KT interventions in these fields we will search MEDLINE, The Cochrane Library and EMBASE from 1995 to 2010, scan references of all eligible studies, and examine five years of table of contents for journals likely to publish quantitative or qualitative studies that focus on developing, implementing or evaluating patient mediated KT interventions. Screening and data collection will be performed independently by two individuals.

CONCLUSIONS: The conceptual framework of patient mediated KT options and outcomes could be used by health care providers, managers, educationalists, patient advocates and policy makers, to guide program planning, service delivery and quality improvement, and by us and other researchers to evaluate existing, or develop new interventions. By raising awareness of options for involving patients in improving their own care, outcomes based on using a knowledge translation approach may lead to greater patient centred care delivery and improved health care outcomes.

38. [J Pain Symptom Manage](#). 2011 Mar 11. [Epub ahead of print]

Effectiveness of Knowledge Translation Interventions to Improve Cancer Pain Management.

[Cummings GG](#), [Armijo Olivo S](#), [Biondo PD](#), [Stiles CR](#), [Yurtseven O](#), [Fainsinger RL](#), [Hagen NA](#).

Abstract

CONTEXT: Cancer pain is prevalent, yet patients do not receive best care despite widely available evidence. Although national cancer control policies call for education, effectiveness of such programs is unclear and best practices are not well defined.

OBJECTIVES: To examine existing evidence on whether knowledge translation (KT) interventions targeting health care providers, patients, and caregivers improve cancer pain outcomes.

METHODS: A systematic review and meta-analysis were undertaken to evaluate primary studies that examined effects of KT interventions on providers and patients.

RESULTS: Twenty-six studies met the inclusion criteria. Five studies reported interventions targeting health care providers, four focused on patients or their families, one study examined patients and their significant others, and 16 studies examined patients only. Seven quantitative comparisons measured the statistical effects of interventions. A significant difference favoring the treatment group in least pain intensity (95% confidence interval [CI]: 0.44-1.42) and in usual pain/average pain (95% CI: 0.13-0.74) was observed. No other statistical differences were observed. However, most studies were assessed as having high risk of bias and failed to report sufficient information about the intervention dose, quality of educational material, fidelity, and other key factors required to evaluate effectiveness of intervention design.

CONCLUSIONS: Trials that used a higher dose of KT intervention (characterized by extensive follow-up, comprehensive educational program, and higher resource allocation) were significantly more likely to have positive results than trials that did not use this approach. Further attention to methodological issues to improve educational interventions and research to clarify factors that lead to better pain control are urgently needed.

39. [Implement Sci.](#) 2011 Mar 7;6:17.

Developing a theory-based instrument to assess the impact of continuing professional development activities on clinical practice: a study protocol.

[Légaré F](#), [Borduas F](#), [Jacques A](#), [Laprise R](#), [Voyer G](#), [Boucher A](#), [Luconi F](#), [Rousseau M](#), [Labrecque M](#), [Sargeant J](#), [Grimshaw J](#), [Godin G](#).

Abstract

ABSTRACT:

BACKGROUND: Continuing professional development (CPD) is one of the principal means by which health professionals (i.e. primary care physicians and specialists) maintain, improve, and broaden the knowledge and skills required for optimal patient care and safety. However, the lack of a widely accepted instrument to assess the impact of CPD activities on clinical practice thwarts researchers' comparisons of the effectiveness of CPD activities. Using an integrated model for the study of healthcare professionals' behaviour, our objective is to develop a theory-based, valid, reliable global instrument to assess the impact of accredited CPD activities on clinical practice.

METHODS: Phase 1: We will analyze the instruments identified in a systematic review of factors influencing health professionals' behaviours using criteria that reflect the literature on measurement development and CPD decision makers' priorities. The outcome of this phase will be an inventory of instruments based on social cognitive theories. Phase 2: Working from this inventory, the most relevant instruments and their related items for assessing the concepts listed in the integrated model will be selected. Through an e-Delphi process, we will verify whether these instruments are acceptable, what aspects need revision, and whether important items are

missing and should be added. The outcome of this phase will be a new global instrument integrating the most relevant tools to fit our integrated model of healthcare professionals' behaviour. Phase 3: Two data collections are planned: (1) a test-retest of the new instrument, including item analysis, to assess its reliability and (2) a study using the instrument before and after CPD activities with a randomly selected control group to explore the instrument's mere-measurement effect. Phase 4: We will conduct individual interviews and focus groups with key stakeholders to identify anticipated barriers and enablers for implementing the new instrument in CPD practice. Phase 5: Drawing on the results from the previous phases, we will use consensus-building methods to develop with the decision makers a plan to implement the new instrument.

DISCUSSION: This project proposes to give stakeholders a theory-based global instrument to validly and reliably measure the impacts of CPD activities on clinical practice, thus laying the groundwork for more targeted and effective knowledge-translation interventions in the future.

40. [Worldviews Evid Based Nurs.](#) 2011 Mar 14. doi: 10.1111/j.1741-6787.2011.00216.x. [Epub ahead of print]

Promoting the Implementation of Evidence-Based Practice: A Literature Review Focusing on the Role of Nursing Leadership.

[Sandströma B](#), [Borglin G](#), [Nilsson R](#), [Willman A](#).

Abstract

Objectives: Despite a growing interest in evidence-based practice (EBP), the implementation into clinical practice of knowledge derived from research has proved to be a cumbersome process. Additionally, the literature seems to present a fragmented picture with research mainly focusing on a few factors of possible importance, among which leadership appears to be one of the more important. Thus, this study aimed to systematically review the literature regarding leadership and its possible influence on the process of implementing EBP. Approach: A literature review was conducted. Electronic database searches were conducted to identify studies on leadership, administrators, managers, implementation, evidence-based and nursing. The search identified 43 potentially relevant papers, of which 36 were excluded after an appraisal was performed by two independent reviewers. Results were extracted and synthesised into a narrative text. Findings: Seven papers were included in the literature review. The findings can be divided into three major areas: (1) characteristics of the leader, (2) characteristics of the organisation and (3) characteristics of the culture. Our findings indicate that leadership is vital for the process of implementing EBP in nursing and also highlights the possible importance of the organisation and the culture in which the leader operates. These factors together with their characteristics were interpreted to be intrinsic in the creation of a nursing milieu that is open and responsive to the implementation of EBP. Conclusions: Although there seems to be scholarly agreement that leadership is a vital part of the process of implementing EBP, more rigorous research is needed concerning the possible role of the leader. Our findings also indicate that leadership cannot be studied in isolation or without being clearly defined.

41. [Eval Program Plann.](#) 2011 Mar 9. [Epub ahead of print]

Community-based addiction treatment staff attitudes about the usefulness of evidence-based addiction treatment and CBO organizational linkages to research institutions.

[Lundgren L](#), [Krull I](#), [Zerden LD](#), [McCarty D](#).

Abstract

This national study of community-based addiction-treatment organizations' (CBOs) implementation of evidence-based practices explored CBO Program Directors' (n=296) and clinical staff (n=518) attitudes about the usefulness of science-based addiction treatment. Through multivariable regression modeling, the study identified that identical factors were associated with directors, and staff attitudes about the usefulness of science-based addiction treatment. For both directors and staff working in an organization that was affiliated with a research institution, working in an organization with better internet technology (measured through TCU-ORC scores) and having higher levels of education were all significantly associated with having more positive attitudes regarding science-based addiction treatment. Implications: government policy that promotes the hiring of addiction treatment clinical staff with professional degrees and encourages the development of linkages between addiction treatment researchers and treatment staff may positively impact attitudes and use of evidence-based addiction treatment practices (EBPs) in CBOs.

42. [Implement Sci](#). 2011 Mar 14;6:19.

[The medium-term sustainability of organisational innovations in the national health service.](#)

[Martin GP, Currie G, Finn R, McDonald R.](#)

Abstract

ABSTRACT:

BACKGROUND: There is a growing recognition of the importance of introducing new ways of working into the UK's National Health Service (NHS) and other health systems, in order to ensure that patient care is provided as effectively and efficiently as possible. Researchers have examined the challenges of introducing new ways of working--'organisational innovations'--into complex organisations such as the NHS, and this has given rise to a much better understanding of how this takes place--and why seemingly good ideas do not always result in changes in practice. However, there has been less research on the medium- and longer-term outcomes for organisational innovations and on the question of how new ways of working, introduced by frontline clinicians and managers, are sustained and become established in day-to-day practice. Clearly, this question of sustainability is crucial if the gains in patient care that derive from organisational innovations are to be maintained, rather than lost to what the NHS Institute has called the 'improvement-evaporation effect'.

METHODS: The study will involve research in four case-study sites around England, each of which was successful in sustaining its new model of service provision beyond an initial period of pilot funding for new genetics services provided by the Department of Health. Building on findings relating to the introduction and sustainability of these services already gained from an earlier study, the research will use qualitative methods--in-depth interviews, observation of key meetings, and analysis of relevant documents--to understand the longer-term challenges involved in each case and how these were surmounted. The research will provide lessons for those seeking to sustain their own organisational innovations in wide-ranging clinical areas and for those designing the systems and organisations that make up the NHS, to make them more receptive contexts for the sustainment of innovation.

DISCUSSION: Through comparison and contrast across four sites, each involving different organisational innovations, different forms of leadership, and different organisational contexts to contend with, the findings of the study will have wide relevance. The research will produce outputs that are useful for managers and clinicians responsible for organisational innovation, policy makers and senior managers, and academics.

43. [Am J Community Psychol](#). 2011 Mar 11. [Epub ahead of print]
Six-Year Sustainability of Evidence-Based Intervention Implementation Quality by Community-University Partnerships: The PROSPER Study.
[Spoth R](#), [Guyl M](#), [Redmond C](#), [Greenberg M](#), [Feinberg M](#).

Abstract

There is a knowledge gap concerning how well community-based teams fare in implementing evidence-based interventions (EBIs) over many years, a gap that is important to fill because sustained high quality EBI implementation is essential to public health impact. The current study addresses this gap by evaluating data from PROSPER, a community-university intervention partnership model, in the context of a randomized-control trial of 28 communities. Specifically, it examines community teams' sustainability of implementation quality on a range of measures, for both family-focused and schoolbased EBIs. Average adherence ratings approached 90% for family-focused and school-based EBIs, across as many as 6 implementation cohorts. Additional indicators of implementation quality similarly showed consistently positive results. Correlations of the implementation quality outcomes with a number of characteristics of community teams and intervention leaders were calculated to explore their potential relevance to sustained implementation quality. Though several relationships attained statistical significance at particular points in time, none were stable across cohorts. The role of PROSPER's continuous, proactive technical assistance in producing the positive results is discussed.

44. [Implement Sci](#). 2011 Mar 9;6(1):18.
Understanding organisational development, sustainability, and diffusion of innovations within hospitals participating in a multilevel quality collaborative.
[Dückers ML](#), [Wagner C](#), [Vos L](#), [Groenewegen PP](#).

Abstract

ABSTRACT:

BACKGROUND: Between 2004 and 2008, 24 Dutch hospitals participated in a two-year multilevel quality collaborative (MQC) comprised of (a) a leadership programme for hospital executives, (b) six quality-improvement collaboratives (QICs) for healthcare professionals and other staff, and (c) an internal programme organisation to help senior management monitor and coordinate team progress. The MQC aimed to stimulate the development of quality-management systems and the spread of methods to improve patient safety and logistics. The objective of this study is to describe how the first group of eight MQC hospitals sustained and disseminated improvements made and the quality methods used.

METHODS: The approach followed by the hospitals was described using interview and questionnaire data gathered from eight programme coordinators.

RESULTS: MQC hospitals followed a systematic strategy of diffusion and sustainability. Hospital quality-management systems are further developed according to a model linking plan-do-study-act cycles at the unit and hospital level. The model involves quality norms based on realised successes, performance agreements with unit heads, organisational support, monitoring, and quarterly accountability reports.

CONCLUSIONS: It is concluded from this study that the MQC contributed to organisational development and dissemination within participating hospitals. Organisational learning effects were demonstrated. System changes affect the context factors in the theory of organisational readiness: organisational culture, policies and procedures, past experience, organisational

resources, and organisational structure. Programme coordinator responses indicate that these factors are utilised to manage spread and sustainability. Further research is needed to assess long-term effects.

45. [Implement Sci.](#) 2011 Mar 3;6(1):16.

Developing and evaluating interventions to reduce inappropriate prescribing by general practitioners of antibiotics for upper respiratory tract infections: A randomised controlled trial to compare paper-based and web-based modelling experiments.

[Tweek S](#), [Ricketts IW](#), [Francis J](#), [Eccles M](#), [Bonetti D](#), [Pitts NB](#), [Maclennan G](#), [Sullivan F](#), [Jones C](#), [Weal M](#), [Barnett K](#).

Abstract

ABSTRACT:

BACKGROUND: Much implementation research is focused on full-scale trials with little evidence of preceding modelling work. The Medical Research Council Framework for developing and evaluating complex interventions has argued for more and better theoretical and exploratory work prior to a trial as a means of improving intervention development. Intervention modelling experiments (IMEs) are a way of exploring and refining an intervention before moving to a full-scale trial. They do this by delivering key elements of the intervention in a simulation that approximates clinical practice by, for example, presenting general practitioners (GPs) with a clinical scenario about making a treatment decision.

METHODS: The current proposal will run a full, web-based IME involving 250 GPs that will advance the methodology of IMEs by directly comparing results with an earlier paper-based IME. Moreover, the web-based IME will evaluate an intervention that can be put into a full-scale trial that aims to reduce antibiotic prescribing for upper respiratory tract infections in primary care. The study will also include a trial of email versus postal invitations to participate.

DISCUSSION: More effective behaviour change interventions are needed and this study will develop one such intervention and a system to model and test future interventions. This system will be applicable to any situation in the National Health Service where behaviour needs to be modified, including interventions aimed directly at the public.

46. [PLoS Med.](#) 2011 Mar;8(3):e1000428. Epub 2011 Mar 22.

Scaling up diarrhea prevention and treatment interventions: a lives saved tool analysis.

[Walker CL](#), [Friberg IK](#), [Binkin N](#), [Young M](#), [Walker N](#), [Fontaine O](#), [Weissman E](#), [Gupta A](#), [Black RE](#).

Abstract

BACKGROUND: Diarrhea remains a leading cause of mortality among young children in low- and middle-income countries. Although the evidence for individual diarrhea prevention and treatment interventions is solid, the effect a comprehensive scale-up effort would have on diarrhea mortality has not been estimated.

METHODS AND FINDINGS: We use the Lives Saved Tool (LiST) to estimate the potential lives saved if two scale-up scenarios for key diarrhea interventions (oral rehydration salts [ORS], zinc, antibiotics for dysentery, rotavirus vaccine, vitamin A supplementation, basic water, sanitation, hygiene, and breastfeeding) were implemented in the 68 high child mortality countries. We also conduct a simple costing exercise to estimate cost per capita and total costs for each scale-up scenario. Under the ambitious (feasible improvement in coverage of all interventions) and universal (assumes near 100% coverage of all interventions) scale-up

scenarios, we demonstrate that diarrhea mortality can be reduced by 78% and 92%, respectively. With universal coverage nearly 5 million diarrheal deaths could be averted during the 5-year scale-up period for an additional cost of US\$12.5 billion invested across 68 priority countries for individual-level prevention and treatment interventions, and an additional US\$84.8 billion would be required for the addition of all water and sanitation interventions.

CONCLUSION: Using currently available interventions, we demonstrate that with improved coverage, diarrheal deaths can be drastically reduced. If delivery strategy bottlenecks can be overcome and the international community can collectively deliver on the key strategies outlined in these scenarios, we will be one step closer to achieving success for the United Nations' Millennium Development Goal 4 (MDG4) by 2015. Please see later in the article for the Editors' Summary.

47. [PLoS One](#). 2011 Mar 21;6(3):e17774.

Achieving MDG 4 in Sub-Saharan Africa: What Has Contributed to the Accelerated Child Mortality Decline in Ghana?

[Nakamura H](#), [Ikeda N](#), [Stickley A](#), [Mori R](#), [Shibuya K](#).

Abstract

BACKGROUND: Recent analyses have suggested an accelerated decline in child mortality in Ghana since 2000. This study examines the long-term child mortality trends in the country, relates them to changes in the key drivers of mortality decline, and assesses the feasibility of the country's MDG 4 attainment.

METHODOLOGY: Data from five Demographic and Health Surveys (DHS) between 1988 and 2008 and the Maternal Health Survey 2007 were used to generate two-year estimates of under-five mortality rates back to 1967. Lowess regression fitted past and future trends towards 2015. A modified Poisson approach was applied on the person-period data created from the DHS 2003 and 2008 to examine determinants of under-five mortality and their contributions to the change in mortality. A policy-modelling system assessed the feasibility of the country's MDG 4 attainment.

FINDINGS: The under-five mortality rate has steadily declined over the past 40 years with acceleration since 2000, and is projected to reach between 45 and 69 per 1000 live births in 2015. Preceding birth interval (reference: 36+ months, relative risk [RR] increased as the interval shortened), bed net use (RR 0.71, 95% confidence interval [CI]: 0.52-0.95), maternal education (reference: secondary/higher, RR 1.71, 95% CI: 1.18-2.47 for primary), and maternal age at birth (reference: 17+ years, RR 2.13, 95% CI: 1.12-4.05) were primarily associated with under-five mortality. Increased bed-net use made a substantial contribution to the mortality decline. The scale-up of key interventions will allow the possibility of Ghana's MDG 4 attainment.

CONCLUSIONS: National and global efforts for scaling up key child survival interventions in Ghana are paying off - these concerted efforts need to be sustained in order to achieve MDG 4.

48. [AIDS](#). 2011 Mar 27;25(6):857-9.

Scaling-up antiretroviral treatment in resource-poor countries: prioritization and choices.

[Korenromp EL](#), [Fakoya A](#), [Viisainen K](#).

49. [J Pediatr Nurs](#). 2011 Apr;26(2):114-21.

Evidence-based practice: perceptions, skills, and activities of pediatric health care professionals.

[Bartelt TC](#), [Ziebert C](#), [Sawin KJ](#), [Malin S](#), [Nugent M](#), [Simpson P](#).

Abstract

The purposes of this descriptive study were to evaluate pediatric professional staffs' perceptions of evidence-based practice (EBP), to identify individual and organizational barriers experienced when applying EBP into practice, and to determine differences in perceptions by those attending and not attending an EBP education series. A total of 486 pediatric health care professionals, 56 of whom attended all of the sessions, completed an anonymous online survey. Professional staff participated in and valued EBP activities but identified barriers to full implementation. Participants in the EBP series were significantly different in several positive ways. Implications for further education and research are delineated based on survey results.