

Charting the way forward to better quality health care: how do we get there and what are the next steps? Recommendations from the Salzburg Global Seminar on making health care better in low- and middle-income economies

M. RASHAD MASSOUD¹, NANA MENSAH-ABRAMPAH¹, SYLVIA SAX², SHEILA LEATHERMAN³, BRUCE AGINS⁴, PIERRE BARKER⁵, EDWARD KELLEY⁶, JAMES R. HEIBY⁷ AND JOHN LOTHERINGTON⁸

¹Quality and Performance Institute, University Research Co., LLC, Bethesda, MD, USA, ²Department of Tropical Hygiene & Public Health, University of Heidelberg, Heidelberg, Germany, ³School of Public Health, University of North Carolina, 2211 West 49th Street, Minneapolis, MN, USA, ⁴New York State Department of Health, AIDS Institute, Albany, NY, USA, ⁵Low and Middle income Countries Division, Institute for Healthcare Improvement, Cambridge, NC, USA, ⁶Department of Patient Safety, WHO, Geneva, Switzerland, ⁷GH/HIDN/HS, US Agency for International Development, Washington, DC, USA, and ⁸Salzburg Global Seminar, Salzburg, Austria

Address reprint requests to: Nana Mensah-Abrampah, Quality and Performance Institute, University Research Co., LLC, Bethesda, MD 20814, USA; Tel: (+1-301) 941-8542; Fax: (+1-301) 941-8427; E-mail: nmensah@urc-chs.com

Accepted for publication 19 September 2012

Abstract

Objective. In April 2012, the Salzburg Global Seminar (SGS) brought together 58 health leaders from 33 countries to review experiences in improving the quality and safety of health-care services in low- and middle-income countries, synthesize lessons learned from those experiences, discuss challenges and opportunities and recommend next steps to stimulate improvement in such countries. This work summarizes the seminar's key results, expressed as five shared challenges and five lessons learned.

Design. The seminar featured a series of interactive sessions with an all-teach, all-learn approach. Session topics were: introduction to the seminar, journey to date, challenges that lie ahead, overcoming the issues of confusion, sustaining execution, strengthening leadership and policy, the role of quality improvement in health systems strengthening and setting the agenda for learning and next steps.

Results. Key lessons from the SGS include reducing terminology and methodology confusion, strengthening the learning agenda, embracing improvement science as a means for strengthening health-care systems, developing leadership in improving health care and ensuring that health-care systems focus on patients and communities. A call to action was developed by SGS participants and presented at the 65th World Health Assembly in Geneva.

Conclusion. There is an inarguable need to move improvement in health care to a new level to attain and exceed the Millennium Development Goals. The challenges can be overcome through concerted action of key stakeholders and the application of scientifically grounded management methods to enable the reliable implementation of high-impact interventions for every patient every time needed.

Keywords: health care, millennium development goals(MDGs), low- and middle-income countries, quality improvement terminology and methodology confusion, quality improvement and knowledge management, quality improvement and research, quality improvement and health systems strengthening, patient focus, Salzburg Global Seminar (SGS) statement, World Health Assembly call to action, quality improvement, leadership

Sec

Many low- and middle-income countries are not on track to achieve the Millennium Development Goals (MDGs) by the 2015 target. For example, only 23 are estimated to be on track to achieve the 75% maternal mortality reduction [1]. This failure is primarily because health-care interventions that are known to save lives are not being implemented for every patient every time they are needed. A gap exists between what is known to work and improve health-care quality and safety and what is being practiced routinely [2–4]. Fortunately, we have good evidence of how to address this critical gap [5–7].

With this impetus, the Salzburg Global Seminar (SGS) on ‘Making Health Care Better in Low and Middle Income Economies: What are the next steps and how do you get there?’ was convened 22–27 April 2012, to chart the way forward for improving health care. University Research Co., LLC (URC) together with its partner organizations, the SGS, United States Agency for International Development (USAID), World Health Organization Patient Safety Programme (WHO PSP), Institute for Healthcare Improvement (IHI), University of North Carolina Gillings School of Public Health, Heidelberg University and HealthQual/NYAIDS Institute convened this seminal event. Funding was made possible by the Bill and Melinda Gates Foundation, German Society for Technical Cooperation, USAID, URC, WHO PSP, IHI, HealthQual/NYAIDS, SGS and participants who covered their own costs. The mission of SGS is to challenge present and future leaders to solve issues of global concern; this seminar was the fourth in a series on health and health care (Salzburg Global Seminar, Austria. Reforming Health Care: Maintaining Social Solidarity and Quality in the Face of Economic, Health and Social Challenges, 7–12 November 2010; Salzburg Global Seminar, Austria. The Greatest Untapped Resource in Healthcare? Informing and Involving Patients in Decisions about Their Medical Care, 12–17 December 2010). Seminar participants reviewed available evidence to improve quality and safety in low- and middle-income countries, synthesized lessons learned, discussed challenges and opportunities and recommended next steps to stimulate desired improvement.

Selection of countries and participants

The seminar was convened by a planning committee of nine members who were experienced in implementing and scaling interventions for improving quality of care in multiple countries. The committee set the agenda, determined content and facilitated sessions. To meet the seminar objectives while being transparent in selecting countries/participants, the committee established criteria used to select participants (Fig. 1). A combination of invitations and applications for participation were solicited to identify improvement leaders who were unknown to the committee. The committee accepted 9 out of 25 applications to the seminar. The

Country selection

- Recognized country commitment to addressing safety and quality
- Presence of a nationally recognized country leader in safety and quality
- Potential impact of the country's participation at Salzburg: population size, size of health care system and country's ability to play a role within its region

Participant selection

- Strong ability to contribute to the seminar
- Strong ability to move the recommendations recommended at Salzburg forward within their country
- Good command of the English language (no formal translations were made at the seminar)
- Gender balance
- Representation from patient's perspective or patient's experience

Figure 1 Participant and country selection.

committee selected 58 global health leaders and implementers from 33 developing countries.

Methodology: seminar design and implementation

The seminar design featured a series of interactive and engaging sessions with an all-teach, all-learn approach. Different techniques such as knowledge cafés, facilitated panel discussions, fishbowls and small group discussions were used to stimulate discussions, generate ideas, capture knowledge shared and engage all participants. A framework paper [8] was distributed to participants before the seminar to guide discussions; the *British Medical Journal* published a summary of the framework [9], also before the seminar.

Ten-minute topic introductions kicked off each session to open discussion. The planning committee involved participants in managing the nine-topic agenda (Fig. 2) that was built on the substantive daily feedback from each participant. The committee summarized each day's conversations and reported them to participants the next morning. Discussions continued during meals and evenings, and inputs from both formal and informal discussions were built into the next day's agenda. This continuous synthesis of discussions fed into the SGS statement, a post-seminar set of recommendations that were addressed to key stakeholders involved in improving care.

Different modes of interaction were a critical seminar component. Due to limits on seminar participation, the International Society for Quality in Health Care (ISQua) hosted an interactive, web-based discussion forum to allow those unable to attend the seminar contribute to pre-seminar discussions. There were 1276 page views before the seminar. During the seminar, virtual participants followed the proceedings through an electronic conference module that featured daily program summaries by the chairperson, newsletters of the previous day's summary and participants' diaries on the discussion forum. There were 1356 page views during the seminar.

Results of seminar deliberations

The conference generated key results in the form of the five shared challenges and five lessons learned. Discussions from

Agenda		Time	Monday April 23, 2012	Tuesday April 24, 2012	Wednesday April 25, 2012	Thursday April 26, 2012	Friday April 27, 2012	Saturday April 28, 2012
9:00	Sunday April 22, 2012	9:00	Review/Preview					Prepare materials for WHA
10:00		10:00	Coffee Break					
10:30		10:30	2 Journey to Date	4 Overcoming Issues of Confusion	6 Strengthening Leadership and Policy	7 Sustaining Execution	9 Next Steps	
12:30	Arrival to Salzburg	12:30	Lunch					
2:00		2:00	3 Challenges Ahead	5 Role of QI in HSS	Visit Salzburg	8 Setting the Agenda for Learning		
4:00	1 Introduction	4:00	Coffee Break				Prepare materials for WHA	
5:45		5:45	Review/Preview					
6:00	Tour SGS	6:00						
7:00	Dinner	7:00	Dinner					
9:00	Bier Stube	9:00	Bier Stube		Fireside Chats	Bier Stube		

Figure 2 SGS agenda.

the ISQua web-based discussion forum focused on three main areas of health care: interventions, resources and leadership. Recurring themes spontaneously generated by contributors of the forum centered around effective knowledge sharing, leadership involvement, involving representatives of all aspects of health care throughout its continuum, dealing with jargon, allocating resources efficiently and integrating health care for cost-effectiveness and sustainability emerged as themes of that discussion.

Health-care challenges in low- and middle-income countries

The seminar identified five interconnected priority challenges in improving quality and safety in health care. The first is the ‘inadequate numbers of competent health care workers’, which is worse in rural areas and in countries subject to internal (that is urban, donor and non-government organization) and international brain drain. Health-care workers lack needed skills due to inadequate initial training, transfers and unmet training needs. These factors, and others, lead to low staff morale that in turn increases the challenge to improve quality and safety. The second challenge—recognizing and addressing different perceptions of quality among providers, policymakers and the public—requires open dialog and leads to the third challenge, ‘engagement of civil society’. Without an engaged civil society, public protection and client (This includes users of health-care systems who are not patients. For example, pregnant women who are delivering in health-care facilities are users not patients.) focus are reduced. This

results in our fourth challenge, ‘systems not designed to meet patient needs’, with many health programs established as vertical, poorly integrated activities in the health system. This leads to our fifth challenge ‘poor health sector planning’, which encompasses lack of comprehensive operational plans, poor integration of vertical programs into health systems and inadequate harmonization of donor programs.

Lessons learned

Terminology and methodology confusion

Terminology and methodology confusion is a major issue among health-care leaders and professionals in low- and middle-income countries. The science underlying health-care improvement is overburdened with multiple terms and jargon describing essentially similar methods and concepts. This confusion is further compounded by the proprietary names different organizations apply to similar methodologies. The net result is that health-care professionals trying to improve care face challenges in understanding, evaluating and selecting appropriate methodologies [10–12]. Overcoming this confusion will be important for future sharing of experiences and learning in health-care quality improvement [13].

The learning agenda

Documenting the improvement process is important and includes knowledge beyond what interventions work and do not work. Knowledge is gained from addressing the

challenges encountered, methods used and relationships involved in the process and how challenges are overcome. This knowledge is valuable and should be captured and made available in various ways for others. It is important to use, learn from and adapt the interventions and the context the data were collected in and share this locally and globally. Global health professionals are starting to realize that to implement high-impact interventions, it is not sufficient to communicate technical knowledge and skills. There is an increasing imperative to communicate the know-how of assuring that life-saving interventions reach every patient every time in his or her own particular setting. As important as the readily available information (that is explicit knowledge) is, researchers must also consider the tacit knowledge (usually not documented) that includes a practical understanding of the setting and the context in which the intervention is implemented [14]. Such tacit knowledge is usually generated in the moment, through conversation [15]. Understanding this makes us realize the limit of traditional methods of written documentation and emphasizes the importance of making the connections between the people who should learn from each other.

As we try to learn, we view health-care systems as complex living entities. Designing improvements in health care is an ever-evolving process with design as a verb rather than a noun [16]. Our methods for learning how to improve health care must continuously be adapted to fit the evolving nature of complex living systems. Research must be designed with the understanding that delivering health care in real life is comprising many intertwined processes that are not perfect. Researchers cannot and must not control all the factors that may influence results. In fact, health professionals want to see how the health-care interventions introduced work in real life and interact with everything else.

Improvement science as a means for strengthening health-care systems

The World Health Organization Health System Framework describes health systems in terms of six core building blocks: finances, health workforce, information, governance, medical products and technologies, and service delivery [4]. Seminar participants agreed that this framework forms a good base for understanding and improving health-care systems, especially if community is added as a seventh building block. The notion underlying how improvement science can strengthen health systems is captured in the statement ‘a system is as strong as the results it delivers’. A strong system should deliver better results, and vice versa. Improvement science enables the attainment of better outcomes from the care delivery systems by introducing changes to them, specifically targeting the weak links. Improvement focuses on the weakest links both within each of the health system building blocks and the links between the blocks [12]. Improvement science can also guide streamlining and coordination actions and interactions within the health system to change procedures and work patterns to make health-care outcomes better.

Leadership in improving health care

Leadership is a universal issue that ranked highly among Salzburg participants’ concerns. Although the need for excellent leadership at all levels is universal to all health systems, participants also identified unique issues and challenges of leadership in low- and middle-income countries. One prominent theme was the capability of leaders in the health sector to align and influence donor assistance—funding and technical—to yield maximal impact. Donor-led or -funded programs are often the initiatives with resources to meet the medical needs of patients and populations and also, importantly, to build infrastructure such as a skilled workforce, new facilities or a reliable drug supply. Aligning with donor programs and harnessing them to improve health system performance are critically important functions of leadership in the health sector.

Patient- and community-focused health-care system

Health-care systems exist for patients, so health-care interventions must be patient centered. Patients and communities must be engaged in the health-care delivery process from the initial stages [17]. As important as getting technical experts involved in the design of health-care delivery is engaging the beneficiaries of that system. Community structures in low- and middle-income countries can form a strong support system for caring for patients. Community health workers are an integral part of community systems and have been instrumental in the care that patients receive. By involving patients and communities, they can contribute to the delivery processes and better manage their health-care challenges. The use of data systems and knowledge sharing is pivotal for patients and communities. It empowers patients and health-care workers with the ability to engage in conversations within the community, to learn about various health-care methodologies and become fully informed about health-care delivery. Involving patients and communities will ensure ownership and sustainability.

Recommendations for charting the way forward: the Salzburg statement and actions

The SGS enabled participants to chart a way forward on how to make health care better in low- and middle-income countries. Seminar attendees sought to bridge the gap between knowledge of interventions that work and what is actually practiced. The key action needed is to strengthen the scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice, and, hence, to improve the effectiveness of health services [18]. What would be important in moving the improvement agenda forward is posing the real-life questions and using both existing knowledge (secondary data) and new knowledge collected specifically for the research (primary data). Collecting information gathered from knowledge management and research, as difficult and complicated as it is,

- Health policy leaders to adopt and promote quality improvement as a cornerstone for better health for all
- Patients to be empowered and at the forefront of their country's shared vision for better health for all
- Communities to actively advocate for quality health care as part of their rights and responsibilities
- Health care workers to continuously improve the delivery of expert and compassionate care to patients and their families
- Those providing technical assistance in global health to incorporate evidence-based improvement methods in their work
- Development partners to invest in approaches that drive sustainable, context-specific improvements in global health
- Governments to be accountable for the improvement of health care through legislation, policies, and necessary resources

Figure 3 An abbreviated version of the SGS statement. For the full statement, visit <http://www.salzburgglobal.org/mediafiles/MEDIA65797.PDF>

- **Collaboration:** Share a common platform in which knowledge, best practices, accomplishments, and failures can be exchanged.
- **Mentoring:** Provide mentoring and coaching to country teams involved or becoming involved in improving the quality of care for its citizens.
- **Sharing:** Continue sharing experiences, including evidence-based results, achievement of best practices, accomplishments, and failures.
- **Advocacy:** Influence international bodies such as the World Health Organization, The Bill and Melinda Gates Foundation, US Agency for International Development (USAID), German International Cooperation (GIZ), ISQua, and other organizations to prioritize "making quality of care better in all countries" and call for the widespread appreciation of the science of improvement in health care.
- **Evidence:** Advocate for a database consolidating terms, methods, and tools associated with improving health care. This database would also house clear guidance for country teams that are starting their improvement journey; it can serve as a way for sharing best practices.

Figure 4 Five identified areas indicate how participants can move forward.

remains far easier and simpler than connecting people to learn from each other. This is becoming more recognized as the critical part of managing knowledge. As a way forward, participants developed the Salzburg Global Statement (Fig. 3) [19], a call to action that makes recommendations for the key stakeholders involved in improving the quality of care. This is intended to enable better care reach every patient every time needed, raise awareness of using health systems strengthening as a means of delivering better care and generate on the ground activity that leads to improving health care. The statement and seminar recommendations are being presented at a number of conferences. (The World Health Assembly in Geneva on 24 May 2012. Recommendations will also be made at the 29th ISQua Conference in Geneva in October 2012 and at the first Africa Regional ISQua Conference in Accra, Ghana, in February 2013.)

At the conclusion of the seminar, participants suggested five main areas, where they could continue to work together on the global quality improvement agenda (Fig. 4). Participants agreed to engage with their governments, civil societies, professionals and each other in implementing these recommendations.

Conclusion

There is an inarguable need to move improvement in health care to a new level to attain and exceed the Millennium

Development Goals. The challenges can be overcome through concerted action of key stakeholders and the application of scientifically grounded management methods to enable the reliable implementation of high-impact interventions for every patient every time needed. This SGS session raised awareness and leveraged commitment for increased involvement of key stakeholders involved in making health care better. The SGS seminar participants have made a commitment to pursue this agenda both in their home countries and globally. The SGS call to action reflects a growing consensus that improving health care must focus on the fundamental task of enabling health-care delivery systems to reliably deliver evidence-based care in every patient encounter.

Acknowledgements

The authors gratefully acknowledge seminar participants' kind contributions, on which this publication was developed: Afghanistan: Mirwais Amiri, Ahmad Jan Naim; Argentina: Ezequiel Garcia-Elorrio; Azerbaijan: Shirin Kazimov; Belize: Michelle Vanzie, Natalia Largaespada Beer; Botswana: Baile Moagi; Cambodia: Vireak Vocurng; Cameroon: Charles Awasom; Colombia: Leonardo Pinzón; Ecuador: Jorge Hermida, Bernarda Salas Moreira; Egypt: Ayman Sabae; Ghana: John Awoonor-Williams, Cynthia Bannerman; India: Amit Paliwal; Ivory Coast: Josephine Diabate, Touobou Jean Nguessan; Kenya: Ahmed Ahmed, Dorcas Amolo; Kyrgyzstan: Aigul Kalieva; Mexico: Enrique Ruelas; Moldova: Tatiana Paduraru, Andrei Romancenco; Mozambique: Antonio Mujovo, Januario Machado Reis; Niger: Maina Boucar, Saidou Mallam Ekoye; Pakistan: Syed Jafri; Philippines: Carlo Irwin Panelo; Russian Federation: Anna Korotkova, Viktor Boguslavsky; Senegal: Babacar Ndoeye; Tajikistan: Mekhriniso Yuldasheva; Thailand: Duangta Onsuwan, Anuwat Supachutikul; Uganda: Sarah Byakika, Robinah Kaitiritimba, Humphrey Megere; United Kingdom: Tracey Cooper, Sir Liam Joseph Donaldson, Nigel Rollins; USA: Nils Daulaire, Kedar Mate, Rob Palkovitz, Mary Taylor; Vietnam: Khoa Nguyen; Yemen Arab Republic: Saleh Nagi; Zambia: Nanthalile Mugala; Zimbabwe: Justice Gweshe. This article was authored by the SGS Planning Committee members.

Funding

Funding was made possible by the Bill and Melinda Gates Foundation, German Society for Technical Cooperation, Salzburg Global Seminar, United States Agency for International Development (USAID), World Health Organization Patient Safety Programme (WHO PSP), Institute for Healthcare Improvement (IHI), University of North Carolina Gillings School of Public Health, Heidelberg University HealthQual/NYAIDS Institute and participants who covered their own costs.

References

1. Hogan MC, Foreman KJ, Naghavi M *et al*. Maternal mortality for 181 countries, 1980–2008: a systematic analysis of progress towards Millennium Development Goal 5. *Lancet* 2010;**375**:1609–23.
2. *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington, DC: National Academy Press, 2001 (Institute of Medicine).
3. Kinney MV, Lawn JE, Kerber KJ (eds). Science in action: saving the lives of Africa's mothers, newborns, and children. Report for the African Academy Science Development Initiative. Cape Town, South Africa, 2009. Available at www.who.int/pmnch/topics/continuum/scienceinaction.pdf/.
4. World Health Organization. *Everybody's Business: Strengthening Health Systems to Improve Health Outcomes: WHO's Framework for Action*. Geneva: WHO, 2007.
5. Franco LM, Marquez L, Ethier K *et al*. Results of collaborative improvement: effects on health outcomes and compliance with evidence-based standards in 27 applications in 12 countries. Collaborative Evaluation Series. Bethesda, MD, University Research Co., LLC (URC), USAID Health Care Improvement Project, 2009.
6. Hermida J, Salas B, Sloan N. Sustainable scale-up of active management of the third stage of labor for prevention of postpartum hemorrhage in Ecuador. *Int J Gynaecol Obstet* 2012;**117**:278–82.
7. Berwick D. Lessons from developing nations on improving health care. *BMJ* 2004;**328**:1124–9.
8. ISQUA Knowledge, Australia. <http://www.isquaknowledge.org/activities/salzburg/welcome/> (17 May 2012, date last accessed).
9. Massoud MR, Mensah-Abrampah N, Barker P *et al*. Improving the delivery of safe and effective healthcare in low and middle income countries. *BMJ* 2012;**344**:e981.
10. Walshe K. Pseudoinnovation: the development and spread of healthcare quality improvement methodologies. *Int J Qual Health Care* 2009;**21**:153–9.
11. McKibbin A, Lokker C, Wilczynski N *et al*. A cross-sectional study of the number and frequency of terms used to refer to knowledge translation in a body of health literature in 2006: a Tower of Babel? *Implementation Sci* 2010;**5**:16.
12. Berwick D. The question of improvement. *JAMA* 2012;**307**:2093–4.
13. Leatherman S, Ferris T, Berwick D *et al*. The role of quality improvement in strengthening health systems in developing countries. *Int J Qual Health Care* 2010;**22**:237–43.
14. Dixon N. The neglected receiver of knowledge sharing. *Ivey Business Journal* 2002;**66**:35–40.
15. Milton N. *Knowledge Management for Teams and Projects*. Oxford, UK: Chandos Publishing, 2005.
16. McDaniel R, Lanham H, Anderson R. Implications of complex adaptive systems theory for the design of research on health care organizations. *Health Care Manage Rev* 2009;**34**:191–9.
17. Groene O. Patient centredness and quality improvement efforts in hospitals: rationale, measurement, implementation. *Int J Qual Health Care* 2011;**23**:531–7.
18. Eccles M, Mittman B. Welcome to implementation science. *Implementation Sci* 2006;**1**:1.
19. Salzburg Global Seminar, Austria. <http://www.salzburgglobal.org/current/blog.cfm?IDMedia=65595>. (17 May 2012, date last accessed).