**Findings:** Preliminary results illuminate that that Brazil has robust public policies to ensure civil society inclusiveness in the development of health policies, as well as mechanisms for the actualisation of accountability and transparency in its pharmaceutical system. However, we also are finding that cases of corruption and inefficiencies are evident in the procurement and selection of medicines. We also have found uneven levels of civil society participation and a lack of government support for including civil society in the formulation and monitoring of health policies.

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## Strengthening monitoring and evaluation to improve quality of care in integrated community case management services in Bugoye, Uganda

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## Collaborations between academic institutions and a Colombian health insurance provider to implement a mobile health platform for chronic disease management: Opportunities and obstacles

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**Program/Project Purpose:** Llamada Saludable is a pilot mobile health (m-health) program using interactive voice response (IVR) calls to monitor diabetes patients and provide self-care education between outpatient visits. While m-health tools are increasingly important in chronic illness management in low-middle income countries, health systems struggle to identify financially sustainable models. From 2013-2015, the University of Michigan (UM) partnered with a large public payer for low-income patients in Colombia (Savia Salud EPS) and a university in Medellín to pilot the Llamada Saludable system. This collaboration unites technology designers, local providers, and payers in a novel and viable partnership to implement a large scale, long term, m-health program.

**Structure/Method/Design:** The partnership is directed through the Living Lab, whose physicians and paramedics are responsible for maintaining the m-health service, recruiting health centers, and training clinicians to use the program and respond to patient alerts. Savia Salud participates in site identification and plans for long-term program scaling. UM provides software, technical assistance, and evaluation plans for determining program impacts.

**Outcomes & Evaluation:** A 12-week pilot program including 150 diabetes patients was successfully implemented in the summer of 2015. Living Lab staff developed a triage system to follow up on adverse health events reported during IVR assessments. UM staff addressed software changes and assisted in troubleshooting technical problems. Patients completed over 70% of their weekly automated calls

and the model of implementation successfully demonstrated proof of concept to patients, health care providers, and Savia Salud. Challenges to program implementation included low buy-in on the part of some administrators, delays in acquiring patient records, and shared telephone lines that hindered calls from going directly to patients.

Going Forward: Llamada Saludable is being extended to other municipalities around Medellín and expanded to address conditions including tuberculosis, HIV, and depression. As the program expands, it will be adapted to accommodate diverse patient and infrastructure demands (e.g. cellular network reliability in rural areas may require the incorporation of community health workers). Tailoring the IVR program to support workflow will be critical to the program's long-term success. Savia Salud plans to conduct a three-year trial to evaluate cost-effectiveness.

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## Strengthening decentralized primary health care in low and middle income countries: A narrative review of frameworks

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**Background:** Primary health care (PHC) is essential for improving population health in low- and middle-income countries (LMICs). Considerable health systems strengthening (HSS) and implementation research challenges exist in decentralized, low-resource LMICs. Lessons learned through decentralizing LMIC health systems suggest the need for an effective context-specific conceptual framework to guide PHC strengthening. While not specific to decentralized, low resource settings, preexisting HSS frameworks may have relevance for future efforts to strengthen decentralized PHC systems in LMICs.

**Methods:** We searched PubMed and Google Scholar with terms such as "primary health care," "decentralization," "developing countries," "policy development," "regional health planning," and "community integration," and "global health," to identify scientific, policy, and white papers that discussed HSS evidence in various global contexts. We reviewed 64 scientific articles referenced through PubMed and 23 policy and white papers, choosing six frameworks.

**Findings:** Six existing frameworks significantly contribute to HSS in various contexts and may be adaptable for application to decentralized areas of LMIC's. These frameworks are: 1) WHO Health System Building Blocks, 2) Starfield's Primary Care Framework, 3) Global Fund to Fight HIV, Tuberculosis, and Malaria's Community Systems Strengthening, 4) Results-Based Logic Model, 5) USAID Five Smart Strategies, 6) Health Systems 20/20. Notable concepts from these frameworks include essential health system components, the role of communities and local context, assessing and iteratively reforming PHC, strengthening decentralized health systems, and negotiating intersectoral roles.

**Interpretation:** A PHC strengthening framework that incorporates all concepts relevant to decentralized areas of LMICs is needed. Consensus should be derived from the applicable concepts within these and other preexisting frameworks, the lessons learned through efforts at decentralizing health systems and current