

# Global Lessons in Frugal Innovation to Improve Health Care Delivery in the United States

## SYNOPSIS

A study comparing “frugal” health care innovations developed in resource-constrained nations found several common features: they lower costs by changing where patients get care and who provides it; they improve provider–patient communication; they change how people seek out and use health services; and they increase efficiency. In the United States, rising demand for health care and trends in payment could make such innovations appealing.

## THE ISSUE

Health care innovations do not always originate in high-income, technologically advanced countries. In 2015, experts identified five health care models or processes from around the world that “do more with less” — and that may be adaptable to the U.S. These included telemedicine systems in Mexico and Singapore, health care delivery efficiencies adopted in India, and community-worker empowerment programs in Kenya and Brazil (see exhibit below). Writing in *Health Affairs*, Commonwealth Fund–supported researchers identified attributes these interventions share, factors critical for U.S. adaptation, and lessons for implementing the reforms and bringing them to scale.

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## COMMON FEATURES OF SUCCESSFUL FRUGAL INNOVATIONS

- ▶ **Changing care settings and providers.** An intervention in Singapore brings specialists to nursing homes through videoconferencing. A program that began in India and subsequently replicated in the Cayman Islands relies on “task-shifting” to ensure that clinicians perform only those tasks for which they are uniquely qualified. Across 12 countries in Africa and Asia, local community health workers are being trained to provide a variety of medical treatments as an alternative to costly hospital care.
- ▶ **Facilitating better communication between care providers and patients.** In Brazil, community health workers are being trained to serve as a bridge between households and providers. Other programs, like GeriCare@North in Singapore and MedicallHome in Mexico and the Philippines, use telemedicine to improve communications. MedicallHome patients can get round-the-clock access to doctors, without the need for appointments or transportation.
- ▶ **Altering care-seeking behaviors and utilization patterns.** Several innovations focus on early support for minor health issues to reduce people’s need for more complex care in the future. BasicNeeds in Kenya, for example, helps patients gain self-management skills and offers peer support for the mentally ill, leading to reduced symptoms and need for hospitalization.
- ▶ **Increasing efficiency of care delivery.** The frugal innovations studied also create value through “leaner” care delivery processes and simplified organization, making it easier to increase scale or incorporate additional innovations. For instance, because community health workers employed by Brazil’s Family Health Strategy already have close ties to every household in their local area, they are able to deliver additional interventions deemed appropriate or necessary.



## LESSONS IN OPERATING AND FINANCING SUCCESSFUL INNOVATIONS

Several operational features are critical to successful innovations, the researchers found. First, innovation leaders must secure early-stage support through mentoring, networking, and financing. Second, commitment from government officials as well as program staff is necessary. Third, interventions must be tailored to meet people’s preferences and behaviors. For example, Mexico’s telemedicine innovation relies on a nearly universally used technology — telephones — to help patients connect with physicians without long wait times or travel expenses.

## THE BIG PICTURE

In the U.S., health systems face increasing demands for care and rising costs. Many are testing alternative payment models that emphasize population health and delivery system efficiency. Frugal innovations like those used in a number of developing countries could enable these U.S. systems to provide their patients with high-impact, low-cost care.

### Features of five successful frugal innovations

	MedicallHome	Narayana Health	BasicNeeds	Family Health Strategy	GeriCare@North
<b>Country</b>	Mexico	India	Kenya	Brazil	Singapore
<b>Target population</b>	Primary care users	Tertiary care users	Secondary and tertiary mental health care	Primary care (basic health support and advice) users	Specialist geriatrics tertiary care users
<b>Core feature</b>	Care delivery through telemedicine	Care delivery through lean processes	Systems support through community empowerment	Systems support through community health workers	Care delivery through telemedicine
<b>Scale</b>	National; replicated in the Philippines and adapted in the United States	31 hospitals in 19 cities in India, 800 telemedicine centers globally; hospital model replicated in Cayman Islands	12 countries across Africa and Asia; replication being piloted in the United States	National, with over 100 million beneficiaries (approximately 63% of the population)	National, with the number of facilities doubled in 2015
<b>Financial model</b>	Reach subscribers through telecommunications providers	Fee-for-service model, primarily cash payments	Financing varies with location, coordinated with public health structures and reimbursement models	Publicly funded by just over half of the primary care budget	Publicly funded by the Singapore Agency for Integrated Care
<b>Potential for cost reduction</b>	Preventing one ED visit, one annual check-up, and one follow-up with a specialist yields an average savings of \$1,500	Provides heart surgery for less than 10% of the average cost in the United States (many of the savings can be replicated in the United States)	Less expensive workers (such as community outreach workers) and family members are used to help manage care; empirical data show decreased hospitalization rates	The annual cost to the Brazilian government is \$50 per person; hospitalization rates are reduced through early diagnosis, care, and long-term monitoring	Telegeriatric consultations have a median cost of \$53 and yield savings of \$9,101 per facility per year, a 43 percent return on investment

Source: Y. Bhatti, A. Taylor, M. Harris et al., “Global Lessons in Frugal Innovation to Improve Health Care Delivery in the United States,” *Health Affairs*, Nov. 2017 36(11):1912–19.

## THE BOTTOM LINE

Frugal innovations from resource-constrained countries use strategies like improving communications through telemedicine and “task-shifting” to enable more workers to provide treatment. These models could be adopted in the United States, which is under increasing pressure to do more with less, and for many.

Y. Bhatti, A. Taylor, M. Harris et al., “Global Lessons in Frugal Innovation to Improve Health Care Delivery in the United States,” *Health Affairs*, Nov. 2017 36(11):1912–19.

*This summary was prepared by Joel Dodge.*