USAID | GEORGIA
FROM THE AMERICAN PEOPLE

USAID
ASSIST PROJECT
Applying Science to Strengthen and Improve Systems

TECHNICAL REPORT

Scaling Up, Sustaining and Institutionalizing Better Health Care in Georgia:

Results and Strategic Recommendations from USAID Support for Improving Quality of Priority Clinical Conditions during 2012–2015

JUNE 2015

This report was prepared by University Research Co., LLC (URC) for review by the United States Agency for International Development (USAID) and authored by Tamar Chitashvili of URC under the USAID Applying Science to Strengthen and Improve Systems (ASSIST) Project. The work of the USAID ASSIST Project is made possible by the generous support of the American people through USAID.

TECHNICAL REPORT

Scaling Up, Sustaining and Institutionalizing Better Health Care in Georgia: Results and Strategic Recommendations from USAID Support for Improving Quality of Priority Clinical Conditions during 2012-2015

JUNE 2015

Tamar Chitashvili, University Research Co., LLC

DISCLAIMER

The contents of this report are the sole responsibility of University Research Co., LLC (URC) and do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

Acknowledgements

This report was prepared by University Research Co., LLC (URC) for review by the United States Agency for International Development (USAID) and authored by Tamar Chitashvili of URC under the USAID Applying Science to Strengthen and Improve Systems (ASSIST) Project. The work described in this report was managed by URC under the USAID Health Care Improvement (HCI) Project, Contract Number GHN-I-03-07-00003-00, and the USAID ASSIST Project, Cooperative Agreement Number AID-OAA-A-12-00101. Implementation started under HCI in 2012 and continued under USAID ASSIST in 2014 when HCI ended.

URC's global partners for USAID ASSIST include: EnCompass LLC; FHI 360; Harvard University School of Public Health; HEALTHQUAL International; Initiatives Inc.; Institute for Healthcare Improvement; Johns Hopkins Center for Communication Programs; and WI-HER LLC.

For more information on the work of the USAID ASSIST Project, please visit www.usaidassist.org or write assist-info@urc-chs.com.

Recommended citation

Chitashvili T. 2015. Scaling Up, Sustaining and Institutionalizing Better Health Care in Georgia: Results and Strategic Recommendations from USAID Support for Improving Quality of Priority Clinical Conditions during 2012-2015. *Technical Report*. Published by the USAID ASSIST Project. Bethesda, MD: University Research Co., LLC (URC).

TABLE OF CONTENTS

List of Figures and Tables i

Acronyms ii

I. INTRODUCTION 1

II. KEY ACTIVITIES AND RESULTS OF THE USAID HCI AND ASSIST PROJECTS 2

A. Activity 1: Improve quality, consistency and continuity of medical care in Georgia in a demonstration region 2

B. Activity 2: Improve access to and use of evidence-based medical information by Georgian physicians and enhance availability of modern, evidence-based treatment 2

III. APPROACHES USED TO SCALE UP, INSTITUTIONALIZE, AND SUSTAIN IMPROVEMENT 9

A. Individual and institutional capacity building 9

B. Scale-up of QI interventions 11

C. Institutionalization 12

1. Developed national policies, strategies, and implementation tools to improve quality of priority high-burden diseases 12

2. Process standardization 13

IV. RECOMMENDATIONS 14

REFERENCES 17

List of Figures and Tables

Figure 1. Average compliance across all process indicators per clinical focus area, Imereti (April 2012 – January 2015), average 343 charts reviewed per month 4

Figure 2. HCI and ASSIST projects' approach to institutionalize best practices from local to national levels 12

Table 1. Selected chart review results of cost-effectiveness assessment in different clinical content areas (April 2012 – Nov 2013) 4

Table 2. Decreased use of non-evidence-based practice: selected chart review results of cost-effectiveness assessment in different clinical content areas (April 2012 – Nov 2013) 6

Table 3. Summary cost results per all clinical focus areas in Georgian Lari 8

Acronyms

ACS	Acute coronary syndrome
ASSIST	USAID Applying Science to Strengthen and Improve Systems Project
CAD	Coronary artery disease
CI	Confidence interval
CME	Continuing medical education
COPD	Chronic obstructive pulmonary disease
CPD	Continuous professional development
CVD	Cardiovascular disease
EB	Evidence-based
ECEA	Effectiveness and cost-effectiveness analysis
GAMPHA	Georgian American Medical and Public Health Association
GEL	Georgian Lari
GIMPHA	Georgian International Medical and Public Health Association
HCI	USAID Health Care Improvement Project
HSSP	USAID Health System Strengthening Project
MoLHSA	Ministry of Labor, Health, and Social Affairs
MOU	Memorandum of understanding
NCD	Non-communicable disease
NCDC	National Center for Disease Control and Public Health
NGO	Non-governmental organization
PEN	Package of Essential Non-communicable diseases
QI	Quality improvement
RTI	Respiratory tract infection
SOW	Scope of work
SUSTAIN	USAID Sustaining Reproductive Health and Maternal and Child Health Services in Georgia
TSMU	Tbilisi State Medical University
URC	University Research Co., LLC
USAID	United States Agency for International Department
WHO	World Health Organization

I. INTRODUCTION

Georgia follows the global trend where progress on addressing nutrition, maternal and child health, family planning, and infectious diseases has occurred simultaneously with increases in non-communicable disease-related mortality. Non-communicable diseases (NCDs) pose a significant challenge to the Georgian health care system and create a substantial social and economic burden for the country. NCDs represent leading causes of morbidity and mortality in Georgia and constitute more than 60% of total morbidity and mortality (MoLHSA 2014).

Despite global evidence that the most detrimental NCDs are largely preventable, low- and middle-income countries like Georgia are poorly prepared to implement high-impact, NCD prevention, early detection and treatment interventions—considered "best buys" by the World Health Organization (WHO) (WHO 2010).

A study carried out by the USAID Health Care Improvement Project (HCI) in 2010 of NCD prevention, screening, and care practices for women of reproductive age in Georgia and three other Eastern European countries demonstrated low to intermediate performance of basic health system functions essential for effective NCD and maternal and newborn care service delivery and variable but generally weak delivery of cost-effective, high-impact NCD prevention and treatment services (Hill et al., 2012).

In addition to the gaps that exist in the organization and delivery of high-quality care at both individual provider and medical facility levels, there is a critical need to strengthen essential health systems functions at the national level to support delivery of high-quality medical care in Georgia. A recent situational analysis of quality in primary health care conducted by the World Bank in Georgia in 2013 highlights that despite great progress in establishing a primary care system in the country (including a primary care workforce, a family medicine curriculum, and a broad set of practice guidelines), there are still major system gaps that need to be addressed (Chan, 2013). These include:

- Lack of clinical decision supports or reminders to implement best practices
- Limited on-going training of physicians
- Lack of data to track how well best practices are implemented
- Lack of a recertification process for medical care providers
- Lack of accountability for improvement in clinical measures of care

To support the Government of Georgia's strategic direction on improving the quality of medical services for priority clinical conditions (NCDs and pediatric respiratory tract infections, the most frequent cause of seeking medical care in children), in August 2011 the USAID Mission in Georgia tasked HCI to address challenges related to quality, consistency, and continuity of medical care in the country. HCI's intervention in Georgia was launched in February 2012 and continued until HCI's closure in September 2014. Beginning in July 2014, technical support for the improvement work continued under the USAID Applying Science to Strengthen and Improve Systems (ASSIST) Project in Georgia until the work was completed in April 2015.

This report summarizes the key activities and results achieved through the support provided under the two projects (HCI and ASSIST) and describes in detail the USAID-funded projects' initiatives to:

- Build individual provider and institutional capacity to deliver evidence-based care
- Scale up best practices and improvement work
- Support the development of national policies, strategies, and implementation tools to institutionalize evidence-based care for non-communicable diseases and respiratory tract infections (RTIs) and asthma in children

Drawing this experience, the report offers actionable recommendations to improve the quality of prevention and management of priority diseases in Georgia and scale up and institutionalize improvement practices in the country's health sector.

II. KEY ACTIVITIES AND RESULTS OF THE USAID HCI AND ASSIST PROJECTS

HCI (from 2012-2014) and ASSIST (2014-2015) provided technical support to address the same two activities, described below. Because both projects were managed by the same team from University Research Co., LLC (URC), the transition from one project to the next was seamless and maintained full continuity of the technical assistance.

A. Activity 1: Improve quality, consistency and continuity of medical care in Georgia in a demonstration region

The two projects applied a combination of different quality improvement (QI) methods in Georgia to improve the quality of medical care in targeted health care facilities in the country, including collaborative improvement, process improvement, process design/redesign, development and review of evidence-based standards, audit and feedback, as well as different regulatory and policy tools. HCI and ASSIST particularly focused on the collaborative improvement model to improve quality, consistency, and continuity of clinical care in 17 ambulatory clinics and village solo practices and three hospitals in Georgia's Imereti Region, with a population of 700,000.

Specifically, the projects supported participating medical facilities to identify gaps in prevention and treatment of priority clinical conditions. Through routine coaching and extensive clinical trainings, the projects helped the teams to plan, test, and refine changes in their local health care processes to improve care delivery. The approach focused on simultaneously improving both clinical content and processes of medical care to achieve reliable delivery of essential, high-impact, and cost-effective prevention and treatment services for high-burden adult and pediatric illnesses.

The clinical focus areas for the projects were determined by the Ministry of Labor, Health, and Social Affairs (MoLHSA) based on the known disease burden (mortality and morbidity) in Georgia, demonstrated poor quality of care (facility assessments mentioned above), and potential for dramatic improvements in quality of care due to strong evidence for high-impact, cost-effective clinical interventions. Consequently, in adult patients, the projects focused on improving quality of care for cardiovascular disease (CVD), chronic obstructive pulmonary disease (COPD), and asthma and their cross-cutting behavioral and physiological risk factors. In pediatric patients, quality improvement interventions were directed at the diagnosis and management of acute respiratory tract infections (RTIs) and asthma. In addition to high-impact clinical interventions, the demonstration collaborative placed a strong emphasis on improving care processes common to all diseases (diagnosis, severity classification, evidence-based case-management/treatment, regular monitoring of disease progression and modification interventions, patient self-management support, etc.), as well as on coordination between hospital and ambulatory services and on patient self-management support.

B. Activity 2: Improve access to and use of evidence-based medical information by Georgian physicians and enhance availability of modern, evidence-based treatment

To strengthen the capacity of Georgian professional associations and improve access to evidence-based medical information, the projects' team supported twinning of Georgian Medical Associations with representatives of the Georgian medical diaspora in the United States and Europe. In collaboration with professors at New York University, the projects supported capacity building of relevant professional associations, managers, and medical care providers from different regions of Georgia to search and

appraise evidence-based medical literature and apply it to clinical practice. In close collaboration with local professional associations and Georgian medical diaspora representatives in the United States, the projects also supported regular revision and translation of evidence-based medical information (including national protocols and guidelines and provider decision support tools, such as care algorithms, pathways, job aids, and summary evidence updates) and disseminated the information through an evidence-based medical portal created by HCI (www.healthquality.ge) and the project's Facebook page (http://www.facebook.com/USAIDGeorgiaHealthCareImprovementProject).

To achieve this ambitious agenda, the projects' team worked closely with the MoLHSA of Georgia, National Center for Disease Control and Public Health (NCDC), implementers of the USAID Sustaining Reproductive Health and Maternal and Child Health Services in Georgia (SUSTAIN), USAID Health System Strengthening Project (HSSP), USAID HIV prevention projects, Georgian-American Medical and Public Health Association (GAMPHA), Georgian International Medical and Public Health Association (GIMPHA), professional medical associations, managers of health care facilities and corporations, non-governmental organizations (NGOs), academic institutions, training centers, regional coordinators, and other key stakeholders to develop and build a shared understanding of project objectives and integrate efforts to reach desired outcomes.

To support the Government of Georgia's strategic priority to improve quality of medical services in the country, the HCI and ASSIST projects built upon successful experiences in Georgia with a strong focus on sustaining the gains achieved and institutionalizing improvement through different policy, administrative, financial, and regulatory tools. The projects also placed significant emphasis on country ownership and capacity building of Georgian professional medical associations, managers, care providers, and other stakeholders as the implementers of evidence-based medical practices and quality improvement efforts.

As a result of 33 months (April 2012 to January 2015) of quality improvement interventions in selected ambulatories and hospitals in Imereti Region, routine monitoring demonstrated sustained improvement of best care practices in all project priority clinical areas, shown in Figure 1. Particularly:

- Average compliance with evidence-based best practices for screening, prevention, and management of CVD risk factors reached 99%, an increase of 77 percentage points from baseline
- Average compliance with management of acute coronary syndrome best practices reached 89%, a gain of 62 percentage points from baseline
- Average compliance with asthma and COPD management best practices in ambulatories and hospitals improved on average by 80 percentage points
- Average compliance with respiratory tract infection management best practices in ambulatories and hospitals improved by 55 and 57 percentage points, respectively

Routine monitoring results in each clinical focus area coincide with results of non-randomized controlled assessment of "Effectiveness and Cost-effectiveness of QI Interventions" (ECEA) implemented by the project. Particularly, the assessment found statistically significant attributable improvement in compliance with best care practices in all project priority clinical areas (Table 1).

Figure 1. Average compliance across all process indicators per clinical focus area, Imereti (April 2012 – January 2015), average 343 charts reviewed per month

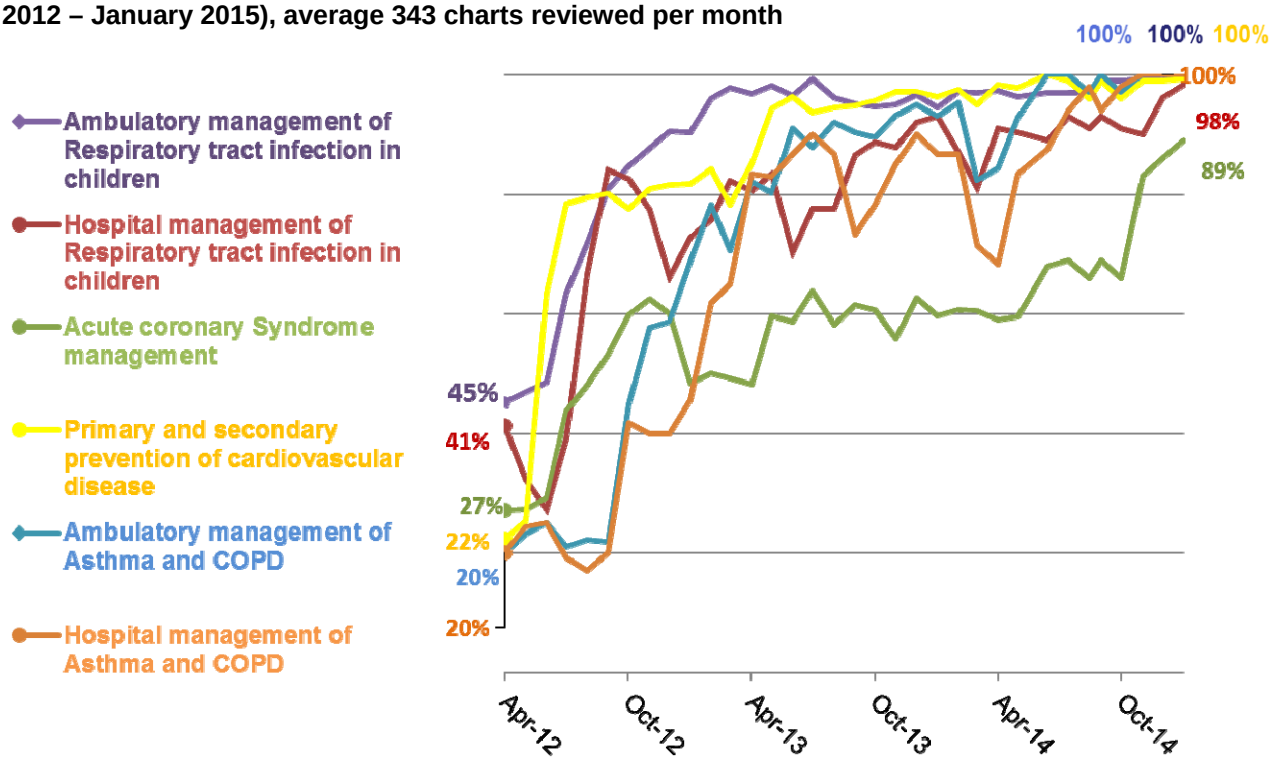


Table 1. Selected chart review results of cost-effectiveness assessment in different clinical content areas (April 2012 – Nov 2013)

Indicators	Baseline (Apr 2012)	End-line (Nov 2013)	Attributable difference
CVD risk factor screening and modification (ambulatory care level)			
% of charts of patients with at least 2 CVD risk factors in which risk of CVD event in next 10 years calculated	0/48	94% (59/63)	94% p<0.0001
% of charts of patients with established risk of CVD event in 10 years > 20% or diabetes treated with multi-drug therapy (aspirin, statin, BP lowering drugs)	0/24	93% (14/15)	92% p<0.0001
% of patient charts with coronary artery disease (CAD) on secondary prevention (Aspirin, beta-blocker, Angiotensin-Converting Enzyme Inhibitors (ACE-I)/Angiotensin Receptor Blockers (ARB), Statin)	6% (3/52)	91% (53/58)	73% p<0.0001
Hospital management of acute coronary syndrome (ACS)			
Initial evidence-based (EB) treatment with all components of anti-ischemic medication bundle recorded[1]	8% (11/131)	70% (94/133)	+41.3% p<0.001
Ongoing EB treatment with all components of high-impact medication bundle recorded [2]	25%	43%	+44.5%

[1] EB treatment with all components of anti-ischemic medication bundle – Opioid Analgesic (Morphine), oxygen, titrated nitrate and aspirin.

Indicators	Baseline (Apr 2012)	End-line (Nov 2013)	Attributable difference
	(25/101)	(51/117)	p<0.001
All components of high-impact medication bundle for secondary prevention prescribed at discharge[3]	6% (6/103)	54% (62/114)	+32.5% p<0.001
Ambulatory management of RTI			
% of medical charts of children treated with antibiotic for RTI for whom chart documentation supports antibiotic use	19% (9/48)	97% (29/30)	67.9% p<0.001
% of medical charts of children treated with antibiotic for RTI with evidence-based first-line antibiotic used	8% (4/48)	93% (28/30)	70.7% p<0.001
% of charts with antibiotics prescribed in guideline's recommended dosage (based on weight or age)	37% (18/48)	93% (28/30)	+32% p=0.036
Hospital management of pneumonia			
% of children hospitalized for pneumonia treated with evidence-based first-line antibiotic	36% (47/130)	89% (116/130)	32.9% p<0.001
% of charts with antibiotics prescribed in guideline's recommended dosage (weight or age)	69% (90/130)	100% 130/130	16.9% p=0.002
Ambulatory and hospital management of asthma			
% of ambulatory charts documenting patient-reported asthma control (presence/absence asthma symptoms and/or use/non-use of rescue medication at last visit)	76% (39/51)	100% (71/71)	38.6% p<0.0002
% of ambulatory charts documenting patient-reported uncontrolled asthma (rescue inhaler use > 2x/week daytime or 2x/mo night-time) in which treatment started or increased[4]	0/6	100% (36/36)	101% p< 0.001
% of (ambulatory/hospital) charts documenting counseling for at least one of four asthma self-management best practices (controller vs. rescue therapy; trigger avoidance; inhaler use technique; taking medications on daily basis and following care-seeking guidelines)	10% (5/51)	10% (5/49)	61.5% p<0.001
Average daily number nebulized bronchodilation treatments documented in first two days of hospitalization.	2.8 95% CI (2.4 – 3.1)	5.1 95% CI (4.6- 5.6)	3.7 p<0.001
% of (ambulatory/hospital) charts documenting patient and/or family counseling at discharge	4% (1/28)	64%(16/25)	78% p<0.001
Ambulatory and hospital management of COPD			
% of ambulatory charts of patients with COPD with at least one rescue bronchodilator (inhaler or nebulizer, short-acting anticholinergic, or inhaler or nebulizer, short-acting β2-agonist)	26.92% (7/26)	60% (12/20)	59.2% p=0.007

[2] Ongoing treatment with aspirin, P2Y12 inhibitor, ACE/ARB and β-blocker or contraindications and limitations recorded in the medical chart

[3] Discharge prescription with aspirin, statin, ACE/ARB and β-blocker or contraindications and limitations recorded in the medical chart.

Indicators	Baseline (Apr 2012)	End-line (Nov 2013)	Attributable difference
prescribed in the sample of charts where medication noted			
% of ambulatory charts of patients with COPD with at least one maintenance medication (inhaler, long-acting anticholinergic or long-acting β2-agonist/inhaled corticosteroid or nebulizer and inhaler steroid) prescribed in the sample of charts where medication noted	26.92% (7/26)	95% (19/20)	35.7% p=0.055
% of ambulatory charts of patients with COPD where specific counseling on all essential items (correct use of inhaler technique, how to take daily medications, distinction between "rescue" and "controller" medications, when patient needs counseling and help and avoidance of harmful occupational factors) recorded	0/28	71.43% (15/21	+71% p<0,001
% of patients hospitalized for COPD exacerbation given on oral steroid at any time during hospitalization (initial + ongoing)	8.33% (2/24)	66.67% (22/33)	+63.9% p<0.001
% of patients hospitalized with COPD exacerbation treated with repeated nebulizer treatments during first two days of hospitalization	0/24	100% (33/33)	+84% p<0.001
Spirometry results recorded anywhere in the hospital chart	4.17% (1/24)	35.71% (10/28)	+31.5% p<0.001
% of hospital charts of patients with COPD where specific counseling on all items (correct use of inhaler technique, how to take daily medications, distinction between "rescue" and "controller" medications, when patient needs counseling and help, and avoidance of harmful occupational factors) recorded	0/24	18.18% (6/33)	18.1% p=0.005

The assessment also showed improvement in proximal outcomes of care (e.g., meeting blood cholesterol levels). Due to the short timeframe of the intervention, the projects were not able to assess long-term outcomes and impact of QI interventions (death or disease burden averted), but there is strong evidence (including from developing countries) that demonstrate positive impact of improved compliance with evidence-based, high-impact clinical interventions introduced by the projects (e.g., effectiveness of use of primary and secondary CVD prevention treatment bundle, cost-effectiveness of tobacco cessation intervention, etc.) on patients' clinical outcomes and cost-effectiveness.

In addition to improved compliance with care practices demonstrated by chart reviews, and provider and patient interview results, the assessment also demonstrated statistically significant decrease in use of non-evidence-based medications and diagnostic tests in all project priority clinical areas (Table 2).

Table 2. Decreased use of non-evidence-based practice: selected chart review results of cost-effectiveness assessment in different clinical content areas (April 2012 – Nov 2013)

Indicators	Baseline (Apr 2012)	End-line (Nov 2013)	Attributable difference
CVD risk factor screening and modification (ambulatory)			
% of charts with so-called metabolic prescribed within 12 months before last visit	19%	9%	9.6% p=0.184
% of charts with phyto-therapeutic and biologically active agents	2%	1.67%	8% p=0.031

Indicators	Baseline (Apr 2012)	End-line (Nov 2013)	Attributable difference
% of charts with so-called nootropes (cognition enhancers) or cerebral vascular protectors	4%	3%	2% p=0.597
Hospital management of ACS			
% of charts with initial treatment with non-EB medications	38% (50/131)	8% (10/133)	-35.4% p<0.001
Average number of non-EB medications recorded for use in initial in-hospital treatment	0.8 95%CI (0.57-0.98) n=131	0.2 95%CI (0.06-0.28) n=133	-0.71 p<0.001
Average number of non-EB medications recorded for use in ongoing treatment	1.0 95%CI (0.76-1.33) n=101	0.25 95%CI (0.12-0.38) n=117	-0.76 p<0.001
% of charts with non-EB medication prescribed at discharge	20% (21/103)	11% (12/114)	-31.6% p<0.001
Ambulatory management of RTI			
% of charts prescribed with one or more non-EB medication prescribed	94% (77/82)	9% (12/132)	-67% p<0.001
% of children of 4 years or younger prescribed cough medication	51% (36/71)	12% (13/103)	-25% p=0.008
Hospital management of pneumonia			
% of medical charts with aminoglycosides administered for pneumonia	43% (56/130)	2% (3/144)	-34% p<0.0001
Average number of non-EB medications (except EB antibiotic, antipyretic or other medication indication for co-morbid condition/symptoms) prescribed per pneumonia hospitalization	6.9 95%CI (6.50 - 7.32)	3.9 95%CI (3.6 – 4.13)	-6.1 p<0.0001
% of charts showing prescription of at least one non-EB medication for in-hospital treatment	100% (130/130)	100% 144/144	-61% p<0.0001
Ambulatory and hospital management of asthma			
% of ambulatory charts documenting prescription for at least one non-EB medication to treat asthma	72 % (36/50)	12% (9/71)	-57% p<0.001
% of charts documenting administration of at least one non-EB medication during hospitalization out of total charts where medication administered[5]	100% (28/28)	40% (10/25)	-63% p<0.001
% of hospital charts with short-acting Theophyline prescribed[6]	96% (27/28)	36% (9/25)	-105% p=<0.001
Ambulatory and hospital management of COPD			

[5] The most common non-EB medications are: Theophylline, short-acting mucolytics, metabolics, vitamins, antihistamines, muscle spasmolytics (e.g., Drotaverine).

[6] Source: Cochrane systematic review that was used during development of national guideline.

Indicators	Baseline (Apr 2012)	End-line (Nov 2013)	Attributable difference
% of ambulatory charts of patients with COPD prescribed at least one non-EB medication at last visit	96% (25/26)	5% (1/20)	-69% p<0.001
% of charts prescribed at least one non-EB medication for in-hospital treatment	100% (24/24)	30% (10/33)	-62.4% p<0.001
% of hospital medical charts with at least one non-EB medication prescribed at discharge	0	3% (1/30)	-58.2% p<0.001

In addition to improved safety and rational use of medications, the abovementioned results create an important opportunity to decrease the cost of treatment for payers (patients, insurance companies, medical care facilities, employers) and associated economic benefits for society.

Indeed, economic evaluation of the projects' QI interventions found that while the total cost of the intervention was 265,066 GEL during 18 months, the **intervention saved four times more** (1,051,976 GEL) on decreased prescription/administration of non-evidence-based medications and diagnostic tests. The analysis of incremental cost-savings from decreased utilization of non-evidence-based practices demonstrated that except hospital treatment of asthma and COPD (where number of patients benefitted from improved care was low), from a cost-effectiveness perspective, the QI intervention is far superior to business-as-usual and significantly increases the probability of receiving better quality of care (Table 3).

Table 3. Summary cost results per all clinical focus areas in Georgian Lari

Dimensions	Number of patients	Average cost of QI (medical facility)	Average cost of QI per medical facility per patient	Total cost of projects (HCI and ASSIST)	Cost of the projects per patient	Total cost of intervention (project+ providers)	Incremental cost-saving from non-EB medications and diag. tests[7] p/patient	Total incremental saving from decreased non-EB practices
COPD ambulatory	1040	2701	2.6	25903	24.91	27.50	41.3	42952
COPD hospital	210	2675	12.7	17268	82.23	94.97	6.6	1386
Asthma ambulatory	1152	2701	2.3	25903	22.49	24.83	45.9	52877
Asthma hospital	116	2675	23.1	17268	148.86	171.92	13.4	1554
RTI ambulatory	26236	16114	0.6	40472	1.54	2.16	8.8	230043
Pneumonia hospital	1544	11212	7.3	26980	17.47	24.74	21.7	33505
CVD	303195	7921	0.0	66763	0.22	0.25	1.6	485112
ACS	6836	6593	1.0	44509	6.51	7.48	29.8	203713
Total				265,066				1,051,976

[7] Source: medical chart, calculated from the project staff.

The economic analysis results summarized in Table 3 shows that the intervention directed to improve vertically- and horizontally-integrated care delivery of high-burden adult and pediatric conditions at primary care and hospital levels is more efficient than a quality improvement intervention focused on single-disease management and one level of care, since some direct (e.g., travel) and indirect costs (e.g., administrative costs, infrastructure maintenance costs, etc.) of an intervention can be significantly reduced. The analysis also shows that investment in **improving quality of high-burden diseases (including chronic diseases that need routine follow-up)** is more efficient and effective, since the cost of the intervention per patient visit is small and there are a large number of patients benefitting from the better care.

The fact that the associated cost-benefit from the QI intervention in three hospitals and 17 ambulatory clinics is about 786,000 GEL, shows that the **spread and scale-up of QI interventions countrywide would save hundreds of million GEL** from decreased non-evidence based practice. Considering that the cost of the demonstration phase of the QI intervention is higher than the cost of its spread in the same number of facilities (due to higher costs associated with assessment of quality gaps, preparation of QI implementation, and development of evaluation tools and materials), the scale-up of QI interventions has the potential to reach even greater cost-savings per patient.

In addition to the abovementioned results, project activities also supported the implementation of the Georgia Health Strategy and Country Development Cooperation Strategy for 2013-2017 and contributed to an increasingly stable, integrated, and healthy society through individual, institutional, and systems capacity building and improved quality of health service delivery. HCI and ASSIST objectives and activities were also relevant to the President's Global Health Initiative principles and contributed to strengthening the Georgian health system, enhancing strategic coordination, and improving metrics for evidence-based decisions.

Specifically, to support Equitable Utilization of Quality Health Care Services (Focal Area #1 of the USAID Mission's main objective, Global Health Initiative), the HCI and ASSIST projects supported: 1) improved access to and use of evidence-based medical information, 2) improved quality of care for leading causes of adult and child mortality and morbidity in one demonstration region and development of different tools to institutionalize and spread the best QI practices countrywide.

III. APPROACHES USED TO SCALE UP, INSTITUTIONALIZE, AND SUSTAIN IMPROVEMENT

The HCI and ASSIST projects used different, context-specific approaches and implemented a range of activities summarized below to scale up and institutionalize QI efforts and sustain the results achieved during the demonstration phase.

A. Individual and institutional capacity building

To contribute to the USAID Mission's strategic priority and build individual, institutional, and systems capacity (Focal Area #2 of Mission's Global Health Initiative), the projects supported continuous strengthening of human resources for health through provision of integrated, competency-based clinical and QI trainings for medical care providers and coaching visits to facility-based QI teams participating in the regional improvement collaborative in Imereti.

During regional learning sessions and coaching visits to the intervention facilities, the HCI and ASSIST team implemented activities to ensure that health workers had clarified and rationalized their tasks to optimize performance by mapping processes across functions and testing ways to ensure an efficient and collaborative working environment. The projects also provided team-based quality improvement approaches and adult learning methods (peer learning, workplace-based training, self-directed learning, job-aids) as well as supported audit and feedback, evaluation, professional development, and rewarding

strong performing teams. Capacity building targeted all physicians involved in delivery of project priority clinical services with intensive clinical and QI trainings, coaching, and shared learning events.

To ensure sustainability of QI interventions, the HCI and ASSIST projects in Georgia supported the capacity development of facility QI teams so that they are able to conduct improvement activities independent of project assistance to address ongoing clinical, organizational, and systemic gaps in their facilities.

The projects' intensive capacity-building activities were implemented through competency-based clinical and QI training of physicians and facility QI teams in the demonstration region. The projects also supported capacity-building of central-level QI managers and representatives of training centers of private medical care corporations to plan, implement and evaluate quality improvement initiatives and scale up QI interventions. The capacity-building for the private medical care corporations was particularly important for scale-up and sustainability because they owned not only project-supported facilities in Imereti Region but also several ambulatory care clinics and hospitals in other parts of the country.

To strengthen institutional capacity of local organizations, where possible, the HCI and ASSIST projects selected training centers (e.g., Kutaisi Nazarishvili Family Medicine Training Center and Kutaisi Clinical and Research Training Center of Medical Corporation EVEX) to implement QI activities.

Clinical content for the abovementioned clinical trainings was developed through close collaboration with local professional associations, such as the Georgia Family Medicine Association, Georgian Respiratory Association, Georgian Hypertension Society, Georgian Cardiology Association, Georgian Association of Pediatricians, and Georgian Association of Allergology and Clinical Immunology.

To support the sustainability of individual and institutional capacity-building activities, with active involvement of Georgian professional medical associations, the projects developed 12 provider continuous medical education modules focused on prevention, diagnosis, and management of priority high-burden adult and pediatric diseases. These modules were derived from trainings conducted for providers in project-supported facilities in Imereti and created to leverage the project's work for greater long-term benefit.

Four continuing medical education (CME) modules (Management of Asthma in Clinical Practice, Management of COPD in Clinical Practice, Practical and Theoretical Aspects of Spirometry, and Tobacco Cessation and Prevention) were adopted by Tbilisi State Medical University (TSMU) and the Continuous Professional Development Council at MoLHSA. Since 2014, these training modules have been regularly offered by the Georgian Respiratory Association under the institutional umbrella of TSMU; the professional association conducts CME modules for medical care providers while TSMU organizes trainings and provides administrative support.

Eight additional modules were also developed by the projects and nationally accredited by the MoLHSA:

- Use of Essential Interventions in Initial Assessment, Diagnosis and Management of Acute Coronary Syndromes
- Assessment Evaluation and Management of Adult Dyslipidemia in Clinical Practice
- Implementation of CVD Risk-factor Screening and Modification in Routine Medical Practice
- Approaches for Accurate Interpretation of Electrocardiogram
- Evidence-Based Medical Practice
- Blood Pressure Measurement and Diagnosis of Hypertension
- Assessment and Management of Coronary Artery Disease
- Health Care Quality

To increase utilization of continuous learning opportunities by the greatest number of physicians in Georgia, the projects also supported communication and information exchanges between medical care

facility managers, providers, and organizations/individuals and invited local physicians to participate in regional learning sessions and other project events.

In order to leverage the knowledge, skills, and experiences of the Georgian medical diaspora in the United States and Europe to the greatest extent possible, the project team worked very closely with them and supported their participation in regional learning sessions and international conferences. For example, the HCI and ASSIST projects organized annual international conferences of the GAMPHA and the GIMPHA in 2013 and 2014, respectively, where more than 15 Georgian medical diaspora representatives from the United States, Europe, Germany, the Netherlands, and other countries shared their experiences and best clinical practices with over 300 medical doctors from all over Georgia.

As a result of the USAID projects' efforts to strengthen institutional linkages between the Georgian medical diaspora and their local counterparts, since the fall of 2014, the EVEX Medical Corporation, the largest network of private hospital and ambulatory care facilities in Georgia, signed a memorandum of understanding with GIMPHA to establish a long-term collaboration for capacity building and knowledge sharing between the Georgian medical diaspora and medical care providers of the EVEX Network. As part of the agreement, in October 2014, EVEX fully funded GIMPHA's International Medical Conference in Georgia where about 20 representatives of the Georgian medical diaspora from 10 European countries shared their knowledge and experiences in the management of various clinical conditions with about 200 medical doctors in Georgia. The collaboration between Georgian medical diaspora organizations and the private medical service provider network in Georgia will guarantee the sustainability of HCI and ASSIST's efforts to utilize skills and experiences of medical diaspora to improve the quality of medical care in Georgia after the project close-out.

B. Scale-up of QI interventions

The HCI and ASSIST projects used various methods to spread and scale up successful QI practices in other regions of Georgia (geographic spread) and encourage QI teams to expand improvement practices to other clinical content areas of their interest (clinical spread).

In order to capture QI experiences and disseminate them countrywide, the HCI and ASSIST team shared the best QI initiatives, tools, interventions, and experiences through various sources, including at national and regional collaborative improvement meetings and through the website and HCI Facebook page.

The HCI and ASSIST team established successful collaboration with medical corporations (Geo-Hospitals and EVEX Medical Corporation) that owned both project-supported as well as other ambulatory care clinics and hospitals in different regions of the country. Specifically, the project team strongly supported the involvement of the central quality management teams of these corporations in regional improvement collaborative activities through their participation in learning sessions and coaching visits. The team also provided regular feedback to the corporations' management teams on progress and recommendations on improvement efforts in respective project-supported sites. As a result of these efforts, several medical care providers were identified as local champions and are currently leading QI efforts in their or other medical care facilities of the corporations. At the ECEA study dissemination workshop, the Deputy Director of EVEX Medical Corporation, Giorgi Phakadze, expressed readiness to spread quality improvement interventions throughout the entire EVEX medical network of 40 hospitals.

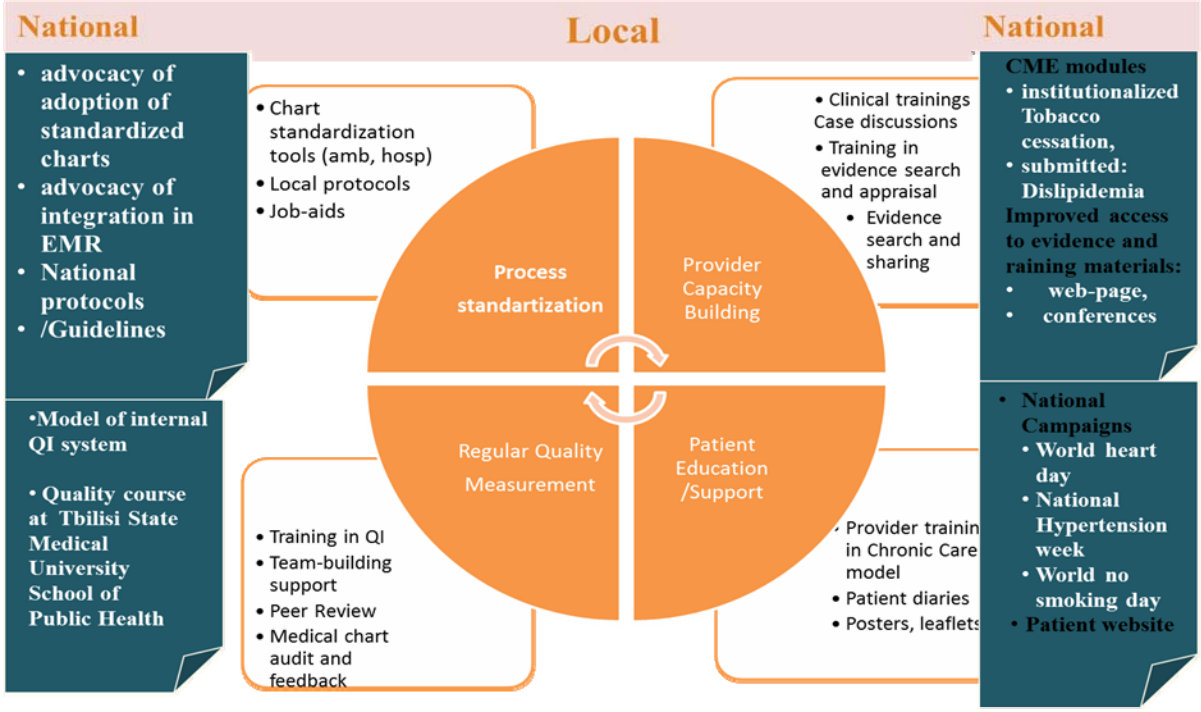
As part of the project's effort to spread and institutionalize high-impact best quality improvement practices outside of the improvement collaborative facilities in the Imereti Region, the projects signed 10 Memoranda of Understanding (MoUs) with medical care corporations, hospitals, and clinics all over Georgia to improve quality of medical care in their respective facilities. In particular, MoUs were signed with two large medical corporations (EVEX Medical Corporation and GeoHospital network, covering more than half of the country with hospital services), several ambulatory clinics, and two professional medical associations. According to the MoUs, the projects shared their QI implementation and evaluation tools with medical facilities and provided minimal technical assistance to their QI teams to implement and

evaluate modern QI practices, enhance effectiveness, and lower the cost of medical care. On the other hand, by signing MoUs, managers of medical facilities express willingness to plan, test, implement, and evaluate QI interventions in their facilities and share the results and lessons learned with HCI and ASSIST. Such private-sector-driven partnerships will help replicate and sustain improvements in quality of medical care after the ASSIST Project's end.

C. Institutionalization

All of the strategies that proved to be successful at local levels were rigorously advocated and institutionalized through various policy, financial, and regulatory tools at the national level. The projects' overarching approach was to work simultaneously at all levels to identify and effectively tackle identified barriers to quality of care and leverage low-cost opportunities for action and advocacy. Figure 2 illustrates activities of the two USAID projects to institutionalize the clinical and improvement best practices from local to national levels.

Figure 2. HCI and ASSIST projects' approach to institutionalize best practices from local to national levels



In particular, the HCI and ASSIST projects contributed to the development of country-led plans and systems and facilitated the development of an enabling environment for high-quality medical services in Georgia. More importantly, the policies, strategies, tools, and standardization introduced by the projects created a solid foundation for the institutionalization of high-quality medical care in Georgia.

1. Developed national policies, strategies, and implementation tools to improve quality of priority high-burden diseases

The HCI and ASSIST projects supported the MoLHSA and the National Center for Disease Control and Public Health (NCDC) to develop the National Hypertension Strategy for 2013–2018 and its implementation plan. While based on the WHO Global Action Plan for Prevention and Control of Non-communicable Diseases for 2013–2020, the plan addresses local needs and priorities, including gaps

identified by the project team during the baseline assessment of effectiveness and cost-effectiveness of CVD prevention and management practices at the ambulatory care level.

HCI also collaborated with the NCDC to develop implementation plans for the prevention and control of other priority NCDs, including the prevention and modification of cross-cutting behavioral and physiological risk factors of major NCDs and diabetes.

To support improved access to quality health services, the two USAID projects worked collaboratively with the Georgian Government to integrate priority NCD services and medications in publicly funded programs. For example, HCI developed and adapted the Package of Essential Non-communicable (PEN) Disease Interventions for Low-income Settings (developed by WHO) and successfully advocated for its inclusion in state health programs. Through close collaboration with MoLHSA and NCDC, project experts also drafted and costed a proposal for inclusion of chronic medications (among them aspirin, antihypertensive medications, statins, and oral hypoglycemic agents) in the basic benefit package funded by the Government of Georgia. Thanks to project efforts, as of September 2012, lipid measurement for persons older than age 65 and oral antibiotics for children under age 5 are covered by publicly funded programs. Similarly, effective July 1, 2013, cholesterol, blood lipids, creatinine, and liver enzymes (essential to predict the risk of CVD and possible complications and assure safe use of regular medications) are now included in the state program and are universally accessible throughout the country. These kinds of policy changes are a strong testament to the lasting impact of USAID's investment in HCI and ASSIST.

To the same end, upon request of the MoLHSA, the project team reviewed the State Diabetes Program for its congruence with current evidence-based guidelines (including PEN, WHO) and for the cost-effectiveness of the services/medications covered by the program. To support improved access to high-impact, cost-effective CVD prevention services and medications, the projects provided recommendations on the benefit package (e.g., recommended inclusion of oral hypoglycemic agents in publicly funded scheme). To support functional integration of diabetes screening and management services into routine primary care, the projects also recommended integration of the vertical diabetes program into the Universal Health Care Program, developed a monitoring and evaluation framework for the program, and provided cost estimations for the new benefit package (based on available statistics, clinical and administrative data, and population surveys).

2. Process standardization

To improve access to and use of evidence-based medical information by Georgian physicians and support consistent delivery of high-impact clinical interventions throughout the country, the HCI and ASSIST team supported the development of the following national guidelines and protocols on diagnosis and management of the priority diseases addressed by the projects:

1. Management of asthma at ambulatory level – National protocol http://www.moh.gov.ge/index.php?lang_id=GEO&sec_id=68&info_id=43
2. Management of asthma exacerbation – National protocol http://www.moh.gov.ge/index.php?lang_id=GEO&sec_id=68&info_id=1942)
3. Management of COPD at ambulatory level – National protocol http://www.moh.gov.ge/index.php?lang_id=GEO&sec_id=68&info_id=49
4. Management of COPD exacerbation – National protocol http://www.moh.gov.ge/index.php?sec_id=31&lang_id=GEO&p=search&searchq=%E1%83%A4%E1%83%A5%E1%83%9D%E1%83%93&fromdate=&todate=&rec_per_page=10
5. Management of hypercholesterolemia at primary care level - National protocol http://www.moh.gov.ge/index.php?sec_id=31&lang_id=GEO&p=search&searchq=%E1%83%B0%E1%83%98%E1%83%9E%E1%83%94%E1%83%A0%E1%83%A5%E1%83%9D%E1%83%9A&fromdate=&todate=&rec_per_page=10

6. Management of ST Segment Elevation Myocardial Infarction (STEMI) - National protocol http://www.moh.gov.ge/index.php?lang_id=GEO&sec_id=68&info_id=1972
7. Management of Non-STEMI - National protocol http://www.moh.gov.ge/index.php?lang_id=GEO&sec_id=68&info_id=1973
8. Prevention and management of CVD - National protocol http://www.moh.gov.ge/index.php?lang_id=GEO&sec_id=68&info_id=1944
9. Spirometry in clinical practice - National protocol http://www.moh.gov.ge/index.php?sec_id=31&lang_id=GEO&p=search&searchq=%E1%83%A1%E1%83%9E%E1%83%98%E1%83%A0%E1%83%9D%E1%83%9B%E1%83%94%E1%83%A2&fromdate=&todate=&rec_per_page=10
10. Management of essential hypertension in adults – clinical guideline, short version, protocol, patient guideline, and diary http://www.moh.gov.ge/index.php?lang_id=GEO&sec_id=68&info_id=2152

All of the abovementioned national guidelines and protocols were approved by the order of the Minister of Labor, Health, and Social Affairs and currently represent the recommended standard of care for nationwide use. The protocols developed by HCI and ASSIST contain all QI implementation support tools (including pathways, medical chart insert forms, and clinical audit criteria) that were successfully tested and implemented in project-supported facilities in the Imereti Region.

To support process standardization and generation of reliable primary data for evidence-based decision making, the HCI and ASSIST projects developed and tested general and disease-specific medical chart standardization tools at ambulatory care and hospital levels. The project team also supported implementation and adoption of these forms through detailed instructions on how to fill out the forms, intensive trainings/on-job coaching to properly complete the forms, and coaching support for use of the clinical data generated from the forms for monitoring the effects of QI interventions. Several medical facilities and corporations adopted the abovementioned medical chart insert forms and are currently using them in their routine clinical practice. As part of the abovementioned national protocols, these forms are also recommended for nationwide use by care providers and approved by relevant orders of the Minister.

To improve process standardization, HCI staff served on the hospital accreditation working group alongside MoLHSA, the Georgian Hospital Association, and the other USAID projects (SUSTAIN, HSSP, and TB Prevention Project). The HCI team also developed accreditation/clinical certification standards (essential care elements and measures) for hospital management of:

- Acute myocardial infarction
- Adult asthma and COPD
- Pediatric asthma
- Pediatric pneumonia

These standards and relevant recommendations on essential inputs (equipment, laboratory capacity, medicines) to enable the delivery of priority “best-buy,” high-impact, evidence-based services were shared with managers of ambulatory clinics and hospitals and contributed to the improved infrastructure of project-supported facilities. For example, medical facilities purchased spirometers, nebulizers, and other equipment to improve diagnoses and management of priority diseases in outpatient and inpatient settings.

IV. RECOMMENDATIONS

The ASSIST and HCI work and results described above demonstrate that there are effective strategies to improve the quality of health care in Georgia which are available, adaptable, and spreadable to the local, regional, and national levels, as well as can be adapted globally. The spread and institutionalization of the

best QI approaches countrywide will result in improving the quality of care for priority diseases in Georgia, decreased morbidity and mortality, and cost savings for payers and society.

With extensive experience applying different methods of scale-up to both clinical and non-clinical improvement interventions in multiple countries, the HCI and ASSIST projects have learned that the cost of scaling-up is less than the cost of improvement in the demonstration phase. The projects have also learned that the pace of improvement is much more rapid in the scale-up phase than during the initial phase. Considering the experience the projects have had in applying different methods of scale-up (collaborative spread, campaign spread, wave-sequence scale-up, reaching every district approach) and local context, the we recommend the wave sequence approach for the spread of better care and QI practices in Georgia (Massoud et al. 2010).

With the wave sequence spread, improvements achieved during the demonstration phase are spread to new facilities in subsequent "waves" by health care providers who were the most engaged in the QI work and produced the best results in the initial demonstration phase. This model could work well in Georgia, since medical care providers working in project-supported medical facilities owned by EVEX or GeoHospitals could become the "spread agents" for the subsequent waves of improvement in other medical facilities owned by these corporations. Currently the abovementioned private medical networks cover the majority of Georgia's territory with hospital services.

To improve quality of care, scale up and institutionalize best practices for the prevention and management of priority diseases, scale up and institutionalization of best QI practices countrywide, the ASSIST team proposes the following recommendations:

1. **Reduce modifiable risk factors for non-communicable diseases and underlying social determinants through creation of an enabling environment for health promotion**
    - Promote assessment and early detection of cross-cutting behavioral and physiologic risk factors of NCDs at every clinical visit
    - Reduce tobacco consumption through increased individual and population tobacco control interventions, outlined in the national tobacco control plan
    - Reduce sodium content in food for catering facilities and food processing industries by development/revision and implementation of relevant regulatory tools
    - Support introductions of limits for trans- and saturated fats and sugar content in food for catering facilities and food processing industries by development and implementation of regulatory mechanisms
    - Improve access to healthy food in wholesale and retail outlets by development and implementation of regulatory mechanisms
    - Support a healthy diet among the Georgian population (including increased fruit and vegetable and lower sodium consumption) by planning and implementing national information campaigns and social marketing initiatives
    - Increase awareness among the population of food content by implementing international labeling standards of Codex Alimentarius
2. **Increase physical and financial access to evidence-based services for the prevention, diagnosis, and management of priority diseases in Georgia**
    - Develop sustainable funding and reimbursement mechanisms for prevention, diagnosis, and management of priority diseases by integration of public funding, donor financial support, and innovative financing mechanisms (including public-private partnerships)

- Increase the effectiveness and cost-effectiveness of state resource investments by integrating high-impact, cost-effective services for the prevention, timely diagnosis, and management of priority diseases in publicly-funded health care programs:
  - Develop/revise the basic benefit package of essential high-impact, cost-effective services and integrate it in publicly-funded health care programs and in private insurance schemes
  - Inform the population (beneficiaries) about the services covered by state health programs to ensure effective utilization of the benefit package, including diagnostic services, consultations and medications
- Integrate essential outpatient medicines for prevention and treatment of priority acute and chronic conditions in the National List of Essential Medications to address limited treatment compliance caused by limited financial access to essential medications
- Improve access to essential outpatient medicines for prevention and treatment of priority acute and chronic conditions by planning and implementing effective cost-containment and rational medication use strategies (including, but not limited to: support the prescription of generic medications through different regulatory and financial tools; improve rational medication prescription practices through capacity-building of medical personnel; and support patient/parent education activities at population and facility levels)

3. Improve the quality of prevention, early diagnosis, and management of priority clinical conditions

- Improve professional knowledge, skills, and practices of human resources in screening, management, and counseling of priority high-burden clinical conditions:
  - Integrate updated recommendations on evidence-based care of priority clinical conditions into all levels of medical education, including pre-service, post-diploma, and Continuous Professional Development (CPD), for health providers, pharmacists, health administrators, and public health providers, with close involvement of respective professional associations
  - Support increased participation of medical personnel into CPD programs through different regulatory and/or financial tools (e.g., evaluate providers' participation in CPD programs as one of the criteria for the accreditation of health care facilities)
  - Develop and initiate standard accreditation/clinical certification programs (including standards, methodology, and implementation tools) for medical facilities with close involvement of professional associations
- Support continuous quality improvement in medical care facilities:
  - Support continuous quality improvement, clinical supervision, and internal clinical audit through establishment of quality improvement teams within medical facilities countrywide
  - Support facility QI teams to assess the quality of care for priority clinical conditions and plan, implement, and evaluate changes in their health care processes to address the gaps and continuously improve quality of care
  - Support generation, collection, and use of clinical data for routine quality monitoring through integration of key QI indicators for prevention and management of priority clinical conditions in medical charts, routine reporting forms, and the national Health Management Information System
  - Revise regulatory tools to ensure quality, safety, and rational medication practices by medical care providers and patients
- Support access to and use of evidence-based medical information by care providers:
  - Develop and implement mechanisms to support close involvement of professional medical associations in development/adaptation of evidence-based medical information applicable for

local settings and provide regular coaching to facility QI teams to improve compliance with evidence-based practices

- Promote compliance with evidence-based practices through development of different policy, regulatory, and financial tools at different levels of the health system

4. **Monitor tendencies in the burden of disease and mortality caused by priority clinical conditions and evaluate the effectiveness of their prevention, early diagnosis, and management practices to support evidence-based decisions at all levels of health system**

- Define national targets for prevention and management of priority clinical conditions in compliance with national priorities, global targets, and monitoring frameworks
- Integrate national targets and their assessment indicators into the national Health Management Information System and promote routine generation, collection, analysis, and use of relevant data for evidence-based policy, program, and clinical decisions
- Periodically plan and implement population- and facility-level studies to assess prevention, screening, and management practices for priority diseases
- Improve quality of vital statistics and registration of mortality causes through capacity building of responsible personnel and regulatory changes
- Strengthen human and institutional capacity for the generation, analysis, and use of high-quality clinical data and quality of care assessment results for evidence-based decisions at different levels (medical facility, regional, and national levels)

REFERENCES

Chan, B. 2013. Towards Accreditation, Results-Based Payment and a Comprehensive Quality Management System for the Republic of Georgia. Washington, DC: World Bank.

Hill K, Chitashvili T, Trevitt J. 2012. Assessment of Non-communicable Disease Prevention, Screening, and Care Best Practices for Women of Reproductive Age in Albania, Armenia, Georgia, and Russia. *Technical Report.* Published by the USAID Health Care Improvement Project. Bethesda, MD: University Research Co., LLC. Available at: https://www.usaidassist.org/resources/assessment-non-communicable-disease-prevention-screening-and-care-best-practices-women.

Massoud MR, Donohue KL, McCannon CJ. 2010. Options for Large-scale Spread of Simple, High-impact Interventions. *Technical Report*. Published by the USAID Health Care Improvement Project. Bethesda, MD: University Research Co., LLC. Available at: https://www.usaidassist.org/resources/options-large-scale-spread-simple-high-impact-interventions.

MoLHSA (Ministry of Labor, Health, and Social Affairs of Georgia), National Center for Disease Control and Public Health. Epidemiology Bulletin 2014/Vol.18 N2. http://www.ncdc.ge/AttachedFiles/GEO884.pdf.

World Health Organization (WHO). 2011. Global Status Report on Noncommunicable Diseases 2010. Geneva, Switzerland: World Health Organization. Available at: http://whqlibdoc.who.int/publications/2011/9789240686458_eng.pdf?ua=1

WHO. Package of Essential Noncommunicable (PEN) Disease Interventions for Primary Health Care in Low-Resource Settings. 2010. Geneva, Switzerland: World Health Organization. Available at: http://whqlibdoc.who.int/publications/2010/9789241598996_eng.pdf

USAID APPLYING SCIENCE TO STRENGTHEN AND IMPROVE SYSTEMS PROJECT

University Research Co., LLC
7200 Wisconsin Avenue, Suite 600
Bethesda, MD 20814

Tel: (301) 654-8338
Fax: (301) 941-8427
www.usaidassist.org