

Clinical strategy and performance overview

Speaker: Gia Khurtsidze, Chief Clinical Officer

GHG Investor Day

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Where we stand now and where are we going

Our main challenges

X

Lack of doctors & Nurses: quality and new generation

X

Quality of basic medical care

X

Lack of services

Our goals (medium term)



Knowledge and expertise advancement of our physicians and nurses through education and practical development



Develop and implement quality management measures at a larger scale within our healthcare facilities



Strengthen existing services and launch new ones



Our clinical team

It is the first class leaders of our medical team that are driving the improvement of service quality and access to healthcare across the organisation

GHG Clinical department



GREGORY (GIA) KHURTSIDZE
Saint John Hospital, North West Kaiser Permanente Division, Longview, WA and Huron Hospital, Cleveland, OH

CLINICAL QUALITY



NINO BUTSKHRIKIDZE
Tbilisi Central University Hospital, was the coordinator of the emergency medicine project in Georgia

POSTGRADUATE EDUCATION



EKA SEPERTELADZE
Georgia Ministry of Labor, Health and Social Affairs, Head of Accreditation Department for postgraduate educational programs

INTERNAL MEDICINE



MARIKA TOIDZE
Milan University Hospital, Weill Medical College of Cornell University in New York Presbyterian Hospital

LABORATORY



NINO ABESADZE
University Medical Centre Hamburg Eppendorf, Oncology and Hematology department for children

MOTHER AND CHILD HEALTH



DAVID TSIBADZE
Jeanne de Flandre Hospital of Lille, Timone Marseille University Hospital, Purpan-Toulouse Paediatric Hospital Network in France

NURSING DEPARTMENT



TAMAR DOWSE
Princess Margaret hospital, Cardinal Health of Swindon, Project Officer at Salvation Army (all in the UK).

SURGICAL

Position is vacant

PATHOLOGY



ALEXI BAIDOSHVILI
VU Medical Centre in Amsterdam, President of International Academy of Pathology Georgian Division (IAP GD)

PEDIATRIC CARDIAC SURGERY



PAATA KALANDADZE
Policlinico di Monza and Papa Giovanni XXIII hospital in Italy, Alder Hey Children's Hospital in Liverpool and the Royal Children's Hospital in Melbourne

CARDIAC SURGERY



ZAZA KATSITADZE
the University Hospital in Switzerland, the Regional Hospital in Tallinn, Estonia, the University Hospital of Geneva in Switzerland

CRITICAL CARE



LEVAN SUKHISHVILI
Schuchtermann Klinik in Germany, Jo Ann Medical Centre and Regional Hospital Sachkhere in Georgia

ONCOLOGY



KOBA KIKNAVELIDZE
The University Hospital of Mannheim in Germany. Scholar of the European Association of Urology

We are growing a new generation of doctors & nurses

Challenge

Lack of doctors & Nurses: quality and new generation

Doctors:

- High number of doctors with Soviet education
- Average age c.50
- Shortage in number of specialties

Nurses:

- The WHO recommends a nurse to doctor ratio of 4:1 for Georgia
- Current ration of 0.9

What we are doing

1

GHG Residency Programs

- Evidence based medicine and western standards of care is our baseline
- In 2016, launched residency programs in 20 specialties (*Pediatric Neurology, Pediatric Emergency Medicine, OBGYN, Anesthesia/Critical Care, Pediatrics, Pediatric gastroenterology, Neonatology, Pediatric Cardiology, Laboratory Medicine, Internal Medicine, Endocrinology, Pediatric Endocrinology and Radiology, General Surgery, Orthopedic Surgery, Neurosurgery, Pediatric General Surgery, Oncology, Radiation Oncology, Cardiac surgery - pending*)
- With total residency quotas of 243
- 58 residents enrolled currently
- 110 vacant positions will be announced in December
- It takes on average 33 months to complete the residency program



Sourcing and expertise advancement of our physicians and nurses through education and practical development

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What we are doing

2

GHG Doctor Retraining Programs 2016

- 1842 doctors in four specialties (OBGYN, pediatrics, internal medicine, Laboratory) and ten programs
- 2098 nurses retrained (Anatomy, Physiology, Medical calculation, procedures.)

Category	Jan-Dec, 2015	Jan-Sep, 2016
NURSE	1960	2098
DOCTOR	1720	1842
Total Number Of Trainees	3680	3940



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What we are doing

3

GHG Trainers of Trainers Program (ToT)

- In 2016, 80 of our employees completed Trainers of Trainers programs in these specialties:
 - Nursing General
 - Nursing Operational
 - Basics of Pediatric Critical Care
 - General Critical Care Basics



Sourcing and expertise advancement of our physicians and nurses through education and practical development



We are growing a new generation of doctors & nurses

Challenge

Lack of doctors & Nurses: quality and new generation

Doctors: Despite the high number of doctors available in Georgia, the average age of our doctors is c.50, they mostly come with Soviet medical education and we have a shortage of doctors in a number of areas.

Nurses: The World Health Organisation recommends a nurse to doctor ratio of 4:1 for Georgia, compared to our current ration of 0.9 nurses per doctor.

What we are doing

4

GHG Continuous Medical Education (CME)

- 2014-2016 - we focused on building continuous medical education platform in five specialties:
 - OBGYN
 - Pediatrics
 - Internal Medicine
 - Lab
 - Nurses
- 14 CME programs conducted
- 630 doctors and 3327 nurses engaged during three year period



Sourcing and expertise advancement of our physicians and nurses through education and practical development



We build robust clinical quality management processes

Challenge

Lack of clinical quality management practices on national level

- Quality Management since the Soviet era still in the early state of development
- No official / comprehensive framework of protocols or treatment guideline available on National level

What we are doing

1

GHG clinical quality framework development

2015-2018

Goals:

- Risk management
- Safety
- Infectious control

Strategy:

- Building quality database
- Training professionals in the area of clinical quality



Develop and implement quality management measures at a larger scale within our healthcare facilities



We build robust clinical quality management processes

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What we are doing

2

GHG Clinical Quality Trainings

- 2015-2016 – Implementation of Clinical quality management framework
- 18 trainings in quality management topics around infectious control, database management and KPIs completed
- 2 trainings ongoing
- 43 training courses planed through 2018



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What we are doing

3

GHG Clinical Quality Protocols

- Internal process of development and implementation of protocols launched
- Evidence based medicine and western standards of care as a baseline for
 - Clinical protocols
 - Nursing protocols
 - Hospital performance SOPs
 - Quality and safety policies
- 129 protocols are approved
- 40 are in progress
- 130 are planned



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What we are doing

4

GHG Clinical Quality Monitoring

- 2016 - Clinical KPI monitoring implemented in 16 hospitals
- Ongoing in 10 hospitals (expected to be completed - 2017)



Develop and implement quality management measures at a larger scale within our healthcare facilities



Service gaps in Georgia



OUTPATIENT CARE

Outpatient encounters in Georgia are low at 3.5 a year, compared to the CIS average of 8.9 and European Region countries of 7.5, according to WHO



LABORATORY SERVICES

- Number of lab tests are still sent to the laboratories abroad.
- Pathology service is outdated and 30 years behind European level



CANCER

- Very low reported incidence levels
- Malignant neoplasms incidence rate in Georgia is 140.3, compared to 543.7 in EU, and the detection of over 30% of malignant neoplasms occur at stage IV



MATERNITY CARE

- Highest number of caesarean among the former Soviet Union republics – 39% of the total number of all deliveries in 2014.
- Maternal mortality ratio per live births three-times higher in Georgia than in the European Region.



EMERGENCY CARE

- Emergency units simply did not exist in Georgia until several years ago.
- hospitals had to staff emergency units with over 15 different specialists, which decreased the quality and efficiency of the ER



NEONATOLOGY

neonatal mortality was 60-80% of under five mortality during previous years, well above the 43% global average.



PEDIATRICS

- Biggest share in medical services import is The culture of regular visits to the doctor at an early pediatric age - as a favorable heritage from Soviet-times



PEDIATRIC CARDIO SURGERY

For almost 15 years, there was only one center in Georgia that provided cardiology and cardiosurgery services for children.



CARDIOLOGY

- hospitalization rate per 100,000 population that was 1,647 in 2014, which is two-fold less than in CIS and European Union countries.
- cardiovascular diseases represent 16.5% of deaths



CRITICAL CARE

- The lack of quality of care in a number of areas in the Georgian healthcare system puts strain on critical care units



We fill healthcare service gaps in Georgia

We launched pediatric cardio surgery

Was

Only one center in Georgia

We achieved

- Launched service in August 2015
- Initiated with multi national cardio surgical teams (Italy, Germany, China, Israel) with hands on training for local team
- 53 surgeries – at average revenue of GEL 15,000
- Strong service quality, with low lethality (2)
- Since October 2016 the local team performs surgeries

Our plans

- Targeting - 250 surgeries per year
- Cardiac Surgery residency
- To have complete Georgian team performing surgeries



Strengthen existing services and launch new ones



We fill healthcare service gaps in Georgia

Picture 1: Liver transplant patients at GHG



Picture 2: Liver transplant patients at GHG





We fill healthcare service gaps in Georgia

We launched liver transplantation

Was

Only 2 centers in Georgia with successful cases

We achieved

- Launched service in December 2014
- Assisted by multi national cardio surgical teams (Italy and India) providing practical training to local team
- Completed 9 successful surgeries at average revenue of GEL 125,000
- Excellent performance record - 0 lethality

Our plans

- Expanding the department, targeting 20 surgeries per year
- Consolidate transplant program (Liver, Kidney – pediatric and adult) in Tbilisi
- Start transplant residency
- Have local team perform surgeries independently in 2017



Strengthen existing services and launch new ones



We fill healthcare service gaps in Georgia

We launched oncology center

Was

Suboptimal due to outdated technology

Soviet era staff with poor access to new western standards of care

Significant outflow of patients abroad

We achieved

- Launched service in July 2015
- In 2015 serviced over 165 patients - at average service revenue of GEL 5,000
- 2016 - so far 700 patients treated
- Target - 2000 per year
- Staff reinforced with Georgian repatriate physician team practicing in the Europe for 2 decades
- Standard of care is approaching European guidelines

Our plans

- Second linear accelerator in Kutaisi
- Expansion of existing unit (it has capacity to double the flow)
- Hematology unit up and running for BMT
- Development of Pediatric Hemato-Oncology



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quality and new generation

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Quality of basic medical care

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Lack of services

What we achieved



- 3500 doc's /4000 nurses retrained
- 80 ToTs developed
- 243 residents in 20 specialties



Quality control framework
development initiated



Over 10 new services introduced

Over 50 service departments
expanded or established at new
locations

Goal

Complete first round of staff
retraining by 2020

Complete quality management
framework implementation.

Receive JCI accreditation on 4 of
our locations by 2020

Continue to launch new services

Capture patient flow export.

QUESTIONS?

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