Elements of Disruptive Innovation

1. Sophisticated technology that simplifies
2. Low-cost innovative business models
3. Economically coherent value network

Regulations and standards that facilitate change

"In the Himalaya region, blindness is a death sentence. People long thought that as you grow old, your hair turns white, your eyes turn white and you die."
— HCP Co-director Dr. Geoff Tabin
The Himalayan Cataract Project (HCP)

- **Humanitarian** – serving the greatest number of unserved blind people possible regardless of their ability to pay
- **High quality** – treating with medical care comparable to western standards
- **Innovation** – refining the best surgical techniques, efficient practices and training methods
- **Direct Impact** – delivering on-site care and long-term care simultaneously
- **Affordability** – sustaining a formula of cost containment that makes care possible for everyone
- **Replication** – disseminating a proven model that can be taken anywhere to cure blindness
Sustainable Cataract Surgery

Tilganga Eye Center, Katmandu, Nepal

Dr. Ruit
Small Incision
Sutureless
$15,000

University of California, San Francisco

Dr. David Chang
Standard US Method

$100,000

No Statistical Difference in Outcomes

98% of patients return to excellent vision
Introduction of Laparoscopy in Mongolia

1\textsuperscript{st} Laparoscopic Cholecystectomy in Mongolia: 1994

Otgondaiai
Ganbold
Rusher
Nyamkhuu
Minimally Invasive Surgery

Dr. Segerlen

Luxury not affordable in the developing world?
Refurbished Equipment

Cameras, scopes, light sources are earlier generation models.

New Equipment

Education, maintenance
Equipment

2 rooms each with:

- 2 towers each with a monitor
- Camera and light source boxes
- 5 and 10 mm scopes, both 30 and 0 degree
- Cameras
- Light cords
- Irrigation sets
- New reusable instruments
- Cautery machines
- Suction
- Anesthesia machine

Generous Donors

Ethicon, US Surgical/ Tyco, Dr. Bookwalter/ Johnson & Johnson, Cardinal Health, Storz, Intermountain Healthcare, Davol, Megadyne
Four-step Hospital Referral System

- **Primary Medical Care**
  - Soum Hospitals

- **Primary and Secondary Medical Care**
  - Inter-Soum Hospitals

- **Secondary Medical Care**
  - Aimag Hospitals
    - Regional Diagnosis and Treatment Center

- **Tertiary Medical Care Hospitals**
  - Maternity and Infants, Cancer, Traumatology and Orthopedics, Cardiac Surgery, Neurosurgery, Colorectal, Urology