COMPASSIONATE CARE WHERE IT'S NEEDED MOST
One in twelve children die before their fifth birthday in Cambodia’s rural areas, a rate FIVE times higher than for children in Phnom Penh.

Why?

- 75% of Cambodia’s population lives in rural areas, where they lack access to high quality healthcare facilities.
- Existing rural hospitals face human capital challenges: physician shortages, salary inequality in comparison with the private market in larger cities & management challenges.
- These hospitals also need hygiene process improvements & sufficient medication, medical supplies & infrastructure.
Cambodia is Experiencing Explosive Economic Growth

- Cambodia’s economy had an average annual real GDP growth rate of 7.1% from 1994 to 2017, making it the world’s sixth-fastest growing economy.

- The percentage of Cambodians living below the poverty line ($0.93 USD per day) declined from 47.8% in 2007 to 19.8% in 2011. It was estimated to have declined further to 13.1% in 2014.

- Still, 70% of people in Kratie province live on less than $3 USD per day, and in Stung Treng and Kratie, 46% and 34% of people respectively are in the lower quintile of wealth.


Health Status Dramatically Improved, but Lags Neighboring Countries

• Life expectancy at birth increased from 56 years in 1996 to 69 years in 2016*

• Under five mortality decreased from 124 to 35 deaths per 1000 live births from 2000 to 2014*

• However, rural areas continue to lag: under 5 mortality in Phnom Penh is only 23 per 1000 live births, but rises to 80 in the rural provinces of Kratie, Mondul Kiri and Ratanak Kiri.**

• 25.6% of deaths in Cambodia are due to non-communicable diseases, poor maternal, and prenatal care, and poor nutrition. This exceeds rates in neighboring countries (Thailand at 15.8% and Vietnam at 11.5%)***

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***https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS?locations=UA
Shortage of Doctors, Especially in Rural Areas

- Much of the Cambodia’s medical infrastructure was decimated during the Khmer Rouge regime – it is estimated that only 45 doctors remained in the country in 1979.

- Today the number of physicians in Cambodia remains low, at fewer than two per 10,000 people – in comparison, Thailand has 4.7 physicians per 10,000 people, and Vietnam has 8.2.

- Doctors are also disproportionately in the large cities, while the population remains heavily rural.

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Public Facilities Face Human Capital Challenges due to Poor Compensation

- Doctors in public facilities are much less compensated vs. the private sector and higher-quality NGO facilities.

- Many in public facilities supplement their income by also practicing in private clinics, sometimes during public hospital working hours.

- Nurses appear to earn more in public facilities, but these facilities have severe nursing shortages and some lack in transparency as to actual salaries.

### Typical Compensation Levels by Facility Type

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Doctors</th>
<th>Nurses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>$500</td>
<td>$350</td>
</tr>
<tr>
<td>Private</td>
<td>$1,300</td>
<td>$200</td>
</tr>
<tr>
<td>High Skill / NGO Facility</td>
<td>$1,800</td>
<td>$550</td>
</tr>
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</table>
Chenla Children’s Healthcare is Transforming Care Inside the Government System

- Chenla is a children’s hospital founded inside of Kratie Provincial Hospital (KPH) – an existing government facility
- Chenla leverages existing facilities, medications, supplies, funding, and staff, combining it with a new leadership, organizational, and human capital model to provide dramatically better care
- This level of care – for children with infectious and respiratory disease, and premature birth – previously did not exist in rural Kratie Province
- Children are treated regardless of ability to pay, but those who can, do. Already, patients choose Chenla over private providers – paying a fee to receive care at the very government facility they previously avoided
- Demand grew from 30 to 1300 children monthly in the first 18 mos.
- With the government funding basic salaries and facilities, Chenla is able to use limited donor funds for higher-level medication, providing care to needy kids, and transporting the very sick to national hospitals
Chenla Children’s Healthcare: How It Works

Unique Human Capital Model
- Founding team from Angkor Hospital for Children, including the hospital’s former director
- Full- & part-time staff of 50 includes only 2 expatriates (both physicians)
- Recruited a talented Cambodian medical director, 3 senior doctors, & head of nursing

Collaboration with Public System
- Basic supplies and medications, and 30% of staff salaries are government-funded
- Health Equity Fund (HEF) covers families unable to pay; fees charged to those who can pay
- Pediatrics care now accounts for 18% of total provincial hospital revenue (up from 2%)

Partnership with NGO’s
- Donor funds cover medication and technology often unavailable in public facilities
- Ensures Chenla able to provide care free-of-charge to families who cannot afford it and/or have exhausted HEF coverage
- Flexibility to expand revenue-generating activities within Cambodia
Chenla Children’s Healthcare: Founding Timeline

2014
- April: Dr. Housworth meets with Minister of Health
- Visit to Kratie – meet KRH staff and leadership

2015
- April: Planet Wheeler Foundation funding
- June: Ptarmigan Foundation funding
- June: MOU signed with Ministry of Health

2016
- July: Children of Cambodia funding
- December: Chenla founding team re-locates to Kratie. Outreach clinics begin. Renovation begins

2017
- July: MOU signed with Ministry of Foreign Affairs
- January: Albizia Capital funding
- June: pediatrics ward open: Chenla accepts first inpatients

2018
- November: USA 501(c)3 Non-Profit Established
- October: 1st Chenla training conference for health centres on Neonatal Care (Partnership with NUH Singapore)
- December: Chenla sees 10,000th patient
- June: MOU signed with Ministry of Health
- January: Kinchan Foundation funding
Chenla Children’s Healthcare at a Glance

26 Inpatient beds, of which 2 ICU and 6 Neonatal

2 Outpatient exam rooms

11 Pediatricians

22 Nurses

10 Support staff (Housekeepers, Security)
Chenla’s Volumes Have Steadily Grown Since Founding

Patients Served, Quarterly 2017-18

- Outreach
- Inpatient
- Outpatient

Q1 17 | Q2 17 | Q3 17 | Q4 17 | Q1 18 | Q2 18 | Q3 18 | Q4 18

[Bar chart showing patient data]
Chenla’s Services

Chenla primarily:
- Treats febrile illnesses, respiratory illnesses, and other infections
- Provides neonatal care
- Stabilizes critical illness for transport to Siem Reap or Phnom Penh. Common problems requiring transport include birth at less than 32 weeks gestational age and sepsis.

More than 40% of the 1883 infectious disease diagnoses were for respiratory infections.
Chenla Has Increased Volumes for Kratie Provincial Hospital

Prior to Chenla taking over the pediatrics ward, KPH’s pediatric patient numbers were significantly lower: admissions declined from 2015 to 2016, then more than doubled in the year that Chenla opened.

In each month of the first year of Chenla’s operation, KPH delivered a larger percentage of the provinces’ babies than it did in the same month the previous year.

KPH has consistently delivered 300+ more babies in each of the post-Chenla years than it did in the year immediately preceding Chenla opening.
Chenla’s presence has driven increases in fees in the hospital overall.

In Chenla’s first full year (2018), HEF funds collected for adult patients was up by 66% (despite a lapse in funding for HEF assessment which meant that no new patients could receive HEF reimbursement for the first half of the year.)
Chenla Financials at a Glance

Donations for 2017 differ from audited statements which included $60,000 from the Ptarmigan Foundation and $45,000 from the Planet Wheeler Foundation in 2016. The audited statements reflect total donations of $513,803 in 2017.

Financials do not reflect:

- Patient and government (HEF) paid user fees totaling $82K in 2018; these are generated by Chenla but go directly to KPH
- Expenses totaling $171K in 2018, which Chenla avoided due to the partnership with KPH. Specifically:
  - Salaries for KPH staff providing shared services & KPH salary payments to Chenla staff: KPH paid for slightly more than 30% of salary cost for Chenla staff in 2018 ($135K)
  - Medication and supplies obtained from the KPH central storehouse (est. $18K/year)
  - Energy costs covered by KPH (est. $18K/year)
  - Costs for supply and maintenance of key energy machinery, such as generators.

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
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</thead>
<tbody>
<tr>
<td>Total Revenue (Donations)*</td>
<td>$408,803</td>
<td>$483,102</td>
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<tr>
<td>Program Expenses</td>
<td>$306,295</td>
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<tr>
<td>G&amp;A</td>
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<tr>
<td>Total Expenses</td>
<td>$334,819</td>
<td>$444,479</td>
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<tr>
<td>Net Revenue</td>
<td>$73,984</td>
<td>$38,623</td>
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</tbody>
</table>

*Donations for 2017 differ from audited statements which included $60,000 from the Ptarmigan Foundation and $45,000 from the Planet Wheeler Foundation in 2016. The audited statements reflect total donations of $513,803 in 2017.
THANK YOU