SOLVING THE POST-ACUTE MORTALITY PUZZLE
AGENDA

Overview
Matrix
Product
Implementation
Finance
Close
OVERVIEW
9,000
**PROS:**
- Fast
- Culturally integrated
- Easy to administer

**CONS:**
- Antimicrobial resistance
- Cost of drug
- Doesn’t address leaky gut issues
Average total price of antibiotic prescription:
2404 Ksh/person ($23.15/person)

3% of poorest family annual income
0.8% of wealthiest family annual income
PROS:
- Individualized care
- Long term solution
- Trustworthy

CONS:
- Too few doctors
- Patients need transportation
- Requires change of
Urban 20min hospital visit: 21366 Ksh/visit ($205.74/visit)
Rural 20min hospital visit: 15691 Ksh/visit ($151.09/visit)

22% of poorest family annual income
7% of wealthiest family annual income
<table>
<thead>
<tr>
<th>PROS:</th>
<th>CONS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long term</td>
<td>Leaky gut</td>
</tr>
<tr>
<td>No harmful side effects</td>
<td>Long timeframe</td>
</tr>
<tr>
<td>Cheap</td>
<td>Doesn’t affect viral or bacterial causes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OVERVIEW</th>
<th>MATRIX</th>
<th>PRODUCT</th>
<th>IMPLEMENTATION</th>
<th>FINANCE</th>
<th>CLOSE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
Total annual cost per person: 1460 Ksh/person ($14.60/person)

2% of poorest family annual income
0.5% of wealthiest family annual income
MATRIX
<table>
<thead>
<tr>
<th></th>
<th>Cost</th>
<th>Accessibility</th>
<th>Cultural Impact</th>
<th>Effectiveness</th>
<th>Sustainability</th>
</tr>
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<tbody>
<tr>
<td>Option 1</td>
<td>Yellow</td>
<td></td>
<td>Green</td>
<td></td>
<td>Red</td>
</tr>
<tr>
<td>Option 2</td>
<td>Red</td>
<td>Yellow</td>
<td>Yellow</td>
<td>Yellow</td>
<td>Red</td>
</tr>
<tr>
<td>Option 3</td>
<td>Green</td>
<td>Yellow</td>
<td>Yellow</td>
<td>Yellow</td>
<td>Green</td>
</tr>
</tbody>
</table>
PRODUCT
**PROBIOTIC POWDER**
replenishes healthy bacteria in the gut

**L-GLUTAMINE POWDER**
necessary for growth + repair of gut lining

**DIGESTIVE ENZYMES**
essential for digestion + nutrient absorption
PROBIOTIC POWDER
replenishes healthy bacteria in the gut

L-GLUTAMINE POWDER
necessary for growth + repair of gut lining

DIGESTIVE ENZYMES
essential for digestion + nutrient absorption

ELECTROLYTE POWDER
sodium, chloride, potassium, calcium, magnesium
PROBIOTIC POWDER
replenishes healthy bacteria in the gut

L-GLUTAMINE POWDER
necessary for growth + repair of gut lining

DIGESTIVE ENZYMES
essential for digestion + nutrient absorption

ELECTROLYTE POWDER
sodium chloride potassium calcium magnesium

13 ESSENTIAL VITAMINS • ZINC • IRON
IMPLEMENTATION
MAIZE: 3.7 million tons

WHEAT: 1.9 m

RICE: 0.5 m

2016
Cornmeal porridge | Staple food of Kenya | 38% of Kenyans’ annual calories
FINANCE
Ministry of Health
- 47.4b Ksh
- ($456,647,808)

Recurrent Health
- 55%
- 26.07b Ksh
- ($231,156,294)

Drugs, Medical Supplies, Operations, and Maintenance
- 10%
- 2.607b Ksh
- ($25,115,629)

Our Program
- 1%
- 26,070,000 Ksh
- ($251,156)
Figure 5: Health Services Allocations as Percent of County Budgets, FYs 2013/14 and 2014/15

- FY 2013/14:
  - Other sectors: 87.0%
  - Health services: 13.0%

- FY 2014/15:
  - Other sectors: 78.5%
  - Health services: 21.5%
9,000 children ≤ 5 years old die annually

• Costs 1516.94 Ksh ($14.60) to feed each child annually

• 15,1516.90 Ksh x 9,000 Children = 13,652,460 Ksh to feed children ($131,000)

• (Cost to feed children) / Total Program budget = % of budget spent on creating treatment

• 13,652,460 Ksh / 26,070,000 Ksh = 0.5236

• 52.36% of budget spent on treatment

• 47.64% cushion for other expenses
APPENDIX SLIDE

Increase in Health Spending  
Development Health Budget  
Division Ministry of Health Funding

Budget Surplus  
County Health Care Spending

Supplement Facts  
Infant Mortality Rate Estimates

Recurrent Health Budget
Figure 1: Health Budget Allocation Pattern (FYs 2013/14–2014/15)

- **FY 2013/14**
  - Total government budget: KSh 1,057.3 million
  - National health sector budget: 3.4%

- **FY 2014/15**
  - Total government budget: KSh 1,182.4 million
  - National health sector budget: 4.0%

Source: GOK, 2013a; GOK, 2013b; GOK, 2014a; GOK, 2014b
Development Health Budget

- **Construction of Facilities**: 51%
- **Vehicles including Ambulences**: 22%
- **Medical Equipment**: 14%
- **Patient Rehabilitation**: 13%
Ministry of Health
- 47.4b Ksh
  ($456,647,808)

Recurrent Health
- 26.07b Ksh
  ($251,156,294)

Drugs, Medical Supplies, Operations, and Maintenance
- 2.607b Ksh
  ($25,115,629)

Our Program
- 26,070,000 Ksh
  ($251,156)
Tax Break + Transportation → 47.64%
Figure 5: Health Services Allocations as Percent of County Budgets, FYs 2013/14 and 2014/15

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- **FY 2014/15**
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<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Value</th>
<th>% Daily Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Total Carbohydrates</td>
<td>3g</td>
<td>2%*</td>
</tr>
<tr>
<td>Total Sugars</td>
<td>3g</td>
<td></td>
</tr>
<tr>
<td>Probiotic Proprietary Blend</td>
<td>50 billion cfu</td>
<td></td>
</tr>
<tr>
<td>Digestive Enzyme Blend</td>
<td>100 mg</td>
<td></td>
</tr>
<tr>
<td>L-Glutamine</td>
<td>1000 mg</td>
<td></td>
</tr>
<tr>
<td>Vitamin A</td>
<td>1,300 IU</td>
<td>100%</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>25 mg</td>
<td>107%</td>
</tr>
<tr>
<td>Vitamin D</td>
<td>600 IU</td>
<td>100%</td>
</tr>
<tr>
<td>Vitamin E</td>
<td>10 IU</td>
<td>100%</td>
</tr>
<tr>
<td>Thiamine</td>
<td>0.5 mg</td>
<td>100%</td>
</tr>
<tr>
<td>Riboflavin</td>
<td>0.5 mg</td>
<td>105%</td>
</tr>
<tr>
<td>Niacin</td>
<td>8 mg</td>
<td>111%</td>
</tr>
<tr>
<td>Pantothenic Acid</td>
<td>3 mg</td>
<td>100%</td>
</tr>
<tr>
<td>Vitamin B6</td>
<td>0.5 mg</td>
<td>100%</td>
</tr>
<tr>
<td>Biotin</td>
<td>12 mcg</td>
<td>107%</td>
</tr>
<tr>
<td>Folate</td>
<td>200 mcg</td>
<td>100%</td>
</tr>
<tr>
<td>Vitamin B-12</td>
<td>1 mcg</td>
<td>107%</td>
</tr>
<tr>
<td>Zinc</td>
<td>5 mg</td>
<td>107%</td>
</tr>
<tr>
<td>Iron</td>
<td>10 mg</td>
<td>100%</td>
</tr>
<tr>
<td>Sodium</td>
<td>300 mg</td>
<td>80%</td>
</tr>
<tr>
<td>Chloride</td>
<td>500 mg</td>
<td>75%</td>
</tr>
<tr>
<td>Potassium</td>
<td>200 mg</td>
<td>50%</td>
</tr>
<tr>
<td>Calcium</td>
<td>200 mg</td>
<td>50%</td>
</tr>
<tr>
<td>Magnesium</td>
<td>100 mg</td>
<td>50%</td>
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*Percent Daily Values are based on a 1000 calorie diet
† Daily Value not established