**Logo, company name

Description automatically generated MotoMeds: A pediatric telemedicine and medication delivery service to increase access to nighttime care**

**Overview:** [Dr Eric Nelson’s team at The University of Florida](https://egh.phhp.ufl.edu/profile/nelson-eric/) is committed to making healthcare available for all children when they need it. Each year over 560,000 children under 5 years of age die and over half of these deaths are caused by diseases that have proven, cost-effective treatments including acute respiratory infections, diarrhea, and malaria. **Why can’t families access care?** In resource limited settings families face many barriers to care, including geography, poverty, and nighttime presentation. Once local clinics have closed for the afternoon families are forced to wait until the morning for non-emergency care. Waiting until the morning puts sick children at risk of transitioning from a pre-emergent illness to an emergent illness.

**Solution: A telemedicine and medication delivery** **service** (TMDS) offers an innovative, cost-effective solution for families to bypass access barriers, receive proven treatments, and avoid expensive and resource intensive emergency care. A TMDS workflow is as follows.

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A person riding a motorcycle on a dirt road

Description automatically generated with medium confidence**Accomplishments:** The MotoMeds TMDS was launched in Gressier Haiti in September 2019 after a decade of formative design work. The service is evolving through a series of research studies in Haiti (H) and Ghana (G) called INACT (Improving Nighttime Access to Care and Treatment) with the following objectives: INACT1-H: understand the need through identifying healthcare seeking behaviors (completed 2019), INACT2-H: determine clinical safety and feasibility of implementing a TMDS in a resource-limited setting (completed 2021), INACT3-H: assess scalability of the TMDS by conducting 80% of patient assessments by phone only and servicing two geographically distinct delivery zones with a single call center (completed 2022), INACT2-G: testing the portability of the TMDS model to a disparate setting with high rates of malaria (Ghana), and INACT4-H: build and evaluate a digital clinical decision support tool to improve guideline adherence and workflow metrics (in progress 2022-2023). To date, we have provided advice and care to over 2000 children with respiratory infections, fevers, diarrhea, and other common childhood illnesses at a cost of about $22 per patient (not including research costs). An analysis comparing MotoMeds to the only alternative for nighttime care, emergency hospital care, suggests the TMDS is a cost-effective solution. Feedback from families at 10-day follow-up has been overwhelmingly positive; 95% of families reported their child’s illness had ‘improved’ or ‘resolved’ and 99% of families rated the service as ‘good’ or ‘great’. The delivery drivers have been able to locate the majority of households at night despite a lack of an address system, well paved roads or streetlights and a challenging socio-political environment.

**Future:** We are in the final steps towards the creation of a transferable package containing versatile and rigorously evaluated clinical decision support tools accompanied by a framework for a delivery system that will enable MotoMeds to be deployed at scale. We are seeking like-minded partners with whom we can share the story of MotoMeds. We welcome opportunities to further discuss expansion of the TMDS model by piloting MotoMeds within the programmatic infrastructure of existing healthcare institutions.

**Websites and media**

* [UF Nelson Lab Research](https://nelson.research.pediatrics.med.ufl.edu/motomeds/)
* [MotoMeds.org](https://www.motomeds.org/)
* [University of California San Francisco Institute for Global Health Sciences Grand Rounds](https://nam10.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3Duc9HiueF7N8&data=05%7C01%7Cmklarman%40ufl.edu%7C4da56a37457f4126314308db15978e11%7C0d4da0f84a314d76ace60a62331e1b84%7C0%7C0%7C638127512894940050%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=jkbASCG2L312GnouGrXZVruH2LqIzYAj1x9y2OokX%2FM%3D&reserved=0) (60 min)
* [TV20: Tech Tuesday Emerging Pathogens Institute interview with Dr Eric Nelson](https://www.wcjb.com/2022/12/27/tech-tuesday-emerging-pathogens-institute/)

**Publication links**

# [Development and Evaluation of a Clinical Guideline for a Pediatric Telemedicine and Medication Delivery Service: A Prospective Cohort Study in Haiti](https://www.medrxiv.org/content/10.1101/2023.02.15.23285858v1)

* [Implementation of a pediatric telemedicine and medication delivery service in a resource-limited setting: A pilot study for clinical safety and feasibility](https://www.sciencedirect.com/science/article/pii/S0022347622011210)
* [A nighttime telemedicine and medication delivery service to avert pediatric emergencies: An exploratory cost-effectiveness analysis](https://www.medrxiv.org/content/10.1101/2021.09.26.21264144v1)
* [Opportunities to catalyse improved healthcare access in pluralistic systems: a cross-sectional study in Haiti](https://bmjopen.bmj.com/content/11/11/e047367)

**A group of people on motorcycles

Description automatically generated with low confidencePodcasts**

* *The Point*; MotoMeds: Saving Lives Through Nighttime Intervention [(Apple Podcast)](https://podcasts.apple.com/us/podcast/moto-meds-saving-lives-through-nighttime-intervention/id1535891641?i=1000599387545) [(Google Podcast)](https://podcasts.google.com/feed/aHR0cHM6Ly9hbmNob3IuZm0vcy8zYjYxNjg4Yy9wb2RjYXN0L3Jzcw?sa=X&ved=0CAMQ4aUDahcKEwj4g-aGspP9AhUAAAAAHQAAAAAQAQ)
* *The Crisis Response Podcast;* Treating sick children at night in Haiti [(Apple Podcast)](https://podcasts.apple.com/us/podcast/the-crisis-response-podcast/id1656115420) [(Spotify)](https://open.spotify.com/show/6wEU8A4nal6lbV8GwEND4t?si=8b7cb23c68b24105&nd=1)