



# Point-of-Care Ultrasound (POCUS) in Eden, NC

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## Eden, NC

Eden is located in northern Rockingham County, NC near the Virginia border.

- Eden was established by the incorporation of three small towns in 1967: Leaksville, Spray, and Draper. Many older folks in NC still refer to the town by these names.
- Eden is a former mill town, and has faced economic struggles like many areas in NC since the mills closed at the end of the 20th century.
- In 2018, Morehead Memorial Hospital joined the UNC Network after facing bankruptcy and closure.

## Summer 2020

During July 2020, a butterfly ultrasound was used in routine obstetric and gynecologic care at UNC Women's in Eden, NC. At UNC Women's, it was used routinely to assess fetal anatomy and position. Patients verbally expressed enthusiasm for the opportunity to receive POCUS to support their care. Its positive reception led to a broader push to introduce other providers in Eden to the technology.

## Butterfly Ultrasound

**Pros:** Versatility, Portability, single probe, education support.

**Cons:** prone to overheating, poorer resolution than traditional machines.

## Benefits of POCUS

Increased patient satisfaction, increased procedural accuracy, increased diagnostic accuracy, reduced invasive procedures, & reduced cost.

**Pitfalls:** Inadequate training, inappropriate use such as replacing necessary imaging studies.

## Project Goals

- Increase medical student knowledge and experience with POCUS
- Improve access to ultrasound technology in Rockingham County
- Evaluate POCUS as a tool for increasing health equity in rural populations

## Project Timeline

- |                 |  |
|-----------------|--|
| <b>Oct 2020</b> | • Identify funding sources & pilot setting     |
| <b>Nov 2020</b> | • Pilot Butterfly probes in interested clinics |
|                 | • Identify opportunities for use               |
|                 | • Identify provider requirements               |
|                 | • Work on Coding and Billing Integration       |

## Project Timeline (cont.)

- |                 |  |
|-----------------|--|
| <b>Dec 2020</b> | <ul style="list-style-type: none"> <li>• Provide provider training</li> <li>• Purchase Butterfly Ultrasounds</li> <li>• Pilot use in clinics</li> <li>• Narrow and specify each clinic plan</li> <li>• Identify MS1 to join project</li> </ul> |
| <b>Jan 2021</b> | • Dedicated Step 1 Study   |
| <b>Feb 2021</b> | • Dedicated Step 1 Study   |
| <b>Mar 2021</b> | • Build survey tools for project assessment  |
| <b>Apr 2021</b> | <ul style="list-style-type: none"> <li>• Survey Patients and Providers</li> <li>• Pilot full integration with billing</li> </ul>   |
| <b>May 2021</b> | <ul style="list-style-type: none"> <li>• Continue evaluation</li> <li>• Build plans for continuity and expansion</li> </ul>  |
| <b>Jun 2021</b> | <ul style="list-style-type: none"> <li>• Determine areas of expansion for future Kenan cohorts</li> <li>• Report findings</li> </ul>   |

## References

- Point of Care Ultrasound: An Overview [Internet]. American College of Cardiology. [cited 2020 Sep 29].
- Ellington DSB. Rockingham County and the Yesteryears. Community Health. 2012;23.
- Sorensen B, Hunskaar S. Point-of-care ultrasound in primary care: a systematic review of generalist performed point-of-care ultrasound in unselected populations. Ultrasound J [Internet]. 2019 Nov 19 [cited 2020 Oct 7];11.

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