

Seneca Healthcare District

MEMORANDUM

TO: Board of Directors

FROM: Brady Haynes, DHA

RE: Radiology Department, Ultrasound Services

DATE: July 10, 2024

Executive Summary

Ultrasound services at Seneca Healthcare District are not new services but access has changed over the years. Prior to our current ultrasound technologist being available one day a week, Seneca Health Care district had ultrasound services three days a week with our past technologist. Currently with our current ultrasound technologist and our radiology teams, focus and dedication it has become a rising service in less than a year with old equipment. Modern ultrasound technology offers clearer imaging and more diagnostic capabilities, which can improve patient outcomes and satisfaction. Our current ultrasound machine was put in place in service years ago and is beyond the end of life. The current equipment was graciously given to us by PDH.

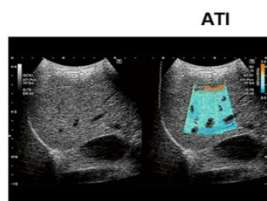
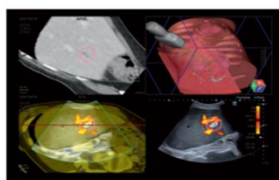
New Ultrasound

The Aplio i700's high-resolution imaging and advanced features make for a powerful tool, enabling our medical staff to perform a wide range of high-quality diagnostic procedures in-house, reducing the need for external referrals.

Advanced Imaging Technologies:



Aplio i700



Superb Micro-vascular Imaging (SMI)
ApliPure+ Compounding
Precision+
Advanced Dynamic Flow (ADF)
Volumetric Ultrasound
3D/4D Luminance Imaging
Adaptive Slice Thickness Control
Multiview & Color Doppler modes

Current and New Ultrasound

Current Aplio MX (Manufactured: 2009)

Issues:

- **Trackball:** Sticks, making measurements difficult.
- **Penetration:** Poor, especially on larger patients.
- **Freezing:** Frequent, requiring power down/restart, causing delays and frustration.
- **Urgent Exams:** Freezes/shuts down.
- **Burning Discs:** Ongoing issues.
- **PACS:** Problems with sending exams.
- **Network:** No indication of connection/disconnection on device.
- **Printer:** None currently.
- **Image Quality:** Poor and unreliable.
- **Display:** Monitor glitching/freezing during exams.
- **Size:** Cumbersome, difficult to maneuver.
- **Performance:** Outdated technology, slower, less efficient workflows.

New Aplio i-700 (Manufactured: 2017)

Improvements:

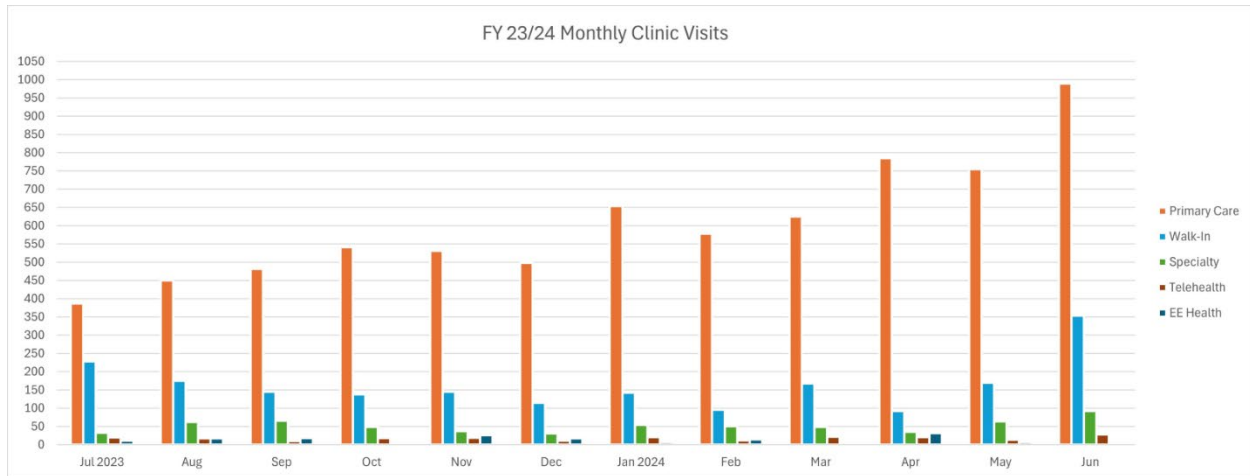
- **Patient Safety:** Reduced need for repeat scans and minimal exposure to prolonged procedures.
- **Experience:** Current US tech has reputable experience and highly recommends.
- **OB & ER Exams:** High confidence in image quality. Effective for early pregnancy scans and DVT exams.
- **Image Quality:** Improved. Enhanced diagnostic technology provides compounding image uniformity, reduced speckle noise, contrast resolution and temporal resolution at depth up to 50cm.
- **Local Services:** Readily available.
- **Productivity:** iDMS technology and intuitive user interface boost daily routine exams as well as the most complex cases.
- **Transducers:** Single crystal, Ultra-wideband & improved uniformity for better visualization and improved penetration for near and far field.
- **Imaging Modes:** Multiple image modes; B-mode, Color Doppler, Power Doppler, Pulsed Wave Doppler, Continuous Wave Doppler, CEUS, 3D volumes.
- **Display:** High resolution LCD monitor
- **Field of View:** Enhanced Wide View function for convex transducers, up to 140 degrees.

Additional Features:

- **Automation:** Follicle count software, contour tracing, exam protocols.
- **Ergonomic Design:** Large, interactive screen, adjustable panel height, fully articulating monitor arm for optimal scanning positions.

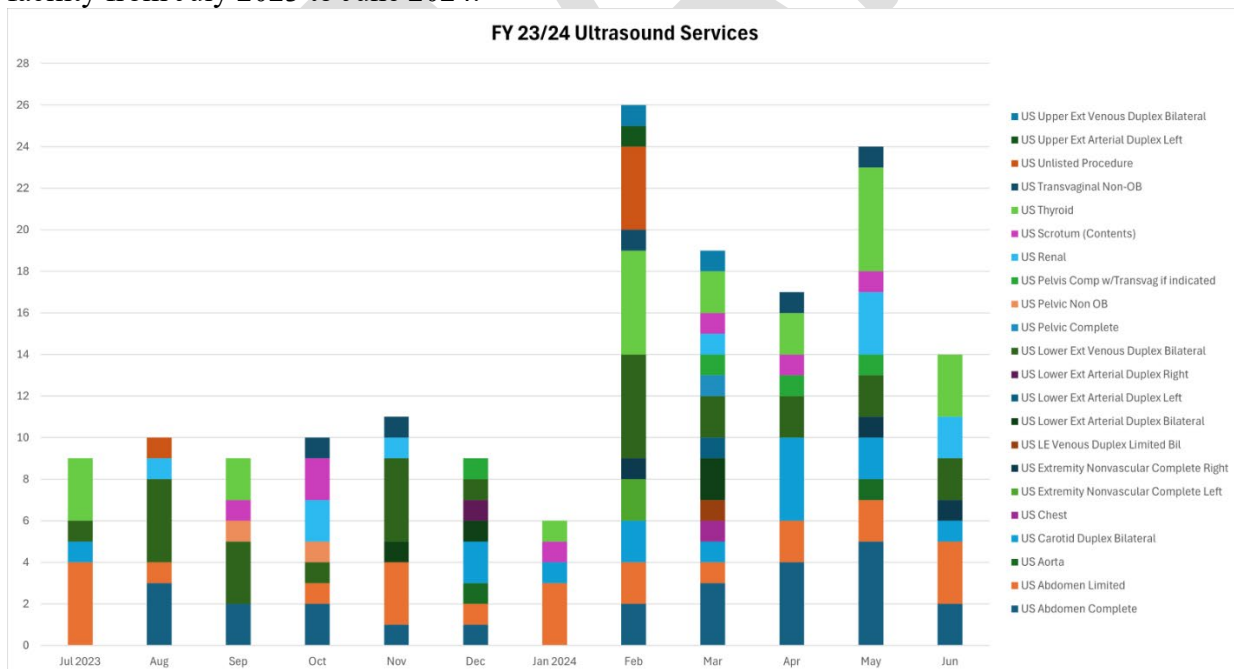
Clinic Visits

The following graph demonstrates the growth in office visits over the last fiscal year. As you can see, there has been a steady increase since July of 2023 to June 2024.



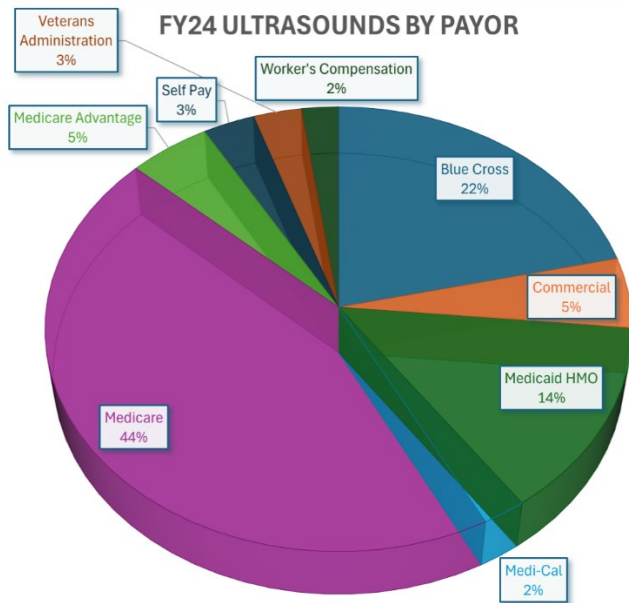
Ultrasound Services

The following graph illustrates the types and volume of ultrasound services rendered at our facility from July 2023 to June 2024.



There is a perceived correlation between Clinic Visits and Ultrasounds services as illustrated in the above graph.

Payor Mix



Medicare, Blue Cross and Medicaid continue to be the highest payers for ultrasound services.

Budget

	Budget	Budget
	06/30/24	06/30/25
Total Exams	92	250
Total Revenue	83,870.00	211,999.29
Total Expenses	45,630.52	75,328.25
Revenue /Expenses	45,988.63	136,671.04

Fiscal Performance

Net Revenue: \$211,999.29
 Expenses: \$75,328.25
 Cost of Equipment: \$95,550.00

ROI

8.4 Months

Summary

I respectfully recommend expanding ultrasound services from our current design of one day a week with outdated equipment, to three days a week with new, advanced equipment that will significantly enhance image quality, patient care, and ultrasound services profitability.

Modern ultrasound technology offers clearer imaging and more diagnostic capabilities, which can improve patient outcomes and satisfaction. By increasing service availability, we can accommodate more patients in need, reducing wait times and improving patient satisfaction.

Additionally, the return on investment is promising with a 8.4-month return on investment, as the initial cost of new equipment and increased staffing are offset by the growing patient volume and revenue. Overall, the financial benefits and improved quality of patient care make this service expansion a highly advantageous move for Seneca Healthcare District and the patients in our community.