



SUBTLE MEDICAL

FASTER, SAFER, SMARTER™

Transforming MRI Image Quality and Patient Throughput with SubtleHD™

A Case Study With **Capital Health**



capitahealth





OVERVIEW

Capital Health, a regional health system serving New Jersey and Pennsylvania, deployed SubtleHD™ across two of its campuses: RMC (Trenton) and Hopewell. Each campus runs a single MRI magnet using SubtleHD. Since its implementation in February 2025, Capital Health has experienced meaningful improvements in patient throughput, workflow efficiency, and overall imaging volume without increasing scan slots or resources.

SOLUTION

In February 2025, Capital Health implemented SubtleHD to enhance image quality while reducing scan time and improving workflow flexibility. SubtleHD was deployed on two MRI scanners without making any changes to scheduling protocols or registration systems.

CHALLENGES

Before SubtleHD, Capital Health faced three key challenges:

- Inability to manage STAT cases quickly along with regular cases
- Increasing inpatient MRI wait times
- Difficulty keeping outpatient appointments on schedule
- Poor image quality on legacy scanners



THE RESULT

SubtleHD Resulted in Significant MRI Volume Growth:

Despite no changes to MRI slot scheduling, Capital Health saw significant increases in imaging volume:

After implementation, radiologists and technologists reported faster table turnover, more predictable scheduling, and fewer delays across inpatient and outpatient services. STAT cases are now handled the same day with ease.

Capital Health Regional Medical Center (Trenton - 1 Scanner)

Outpatient MRI:

March: **+32 scans**

April: **+44 scans**

Inpatient MRI:

March: **+64 scans**

April: **+36 scans**

Capital Health Medical Center - Hopewell (Pennington - 1 Scanner)

Outpatient MRI:

March: **+90 scans**

April: **+77 scans**

Inpatient MRI:

March: **+14 scans**

April: **+30 scans**

STAFF FEEDBACK

"Patients are on and off the table quicker, and we know we can get inpatients and STATs done on time."

"This implementation was the easiest process we've experienced with seamless coordination and minimal disruption."



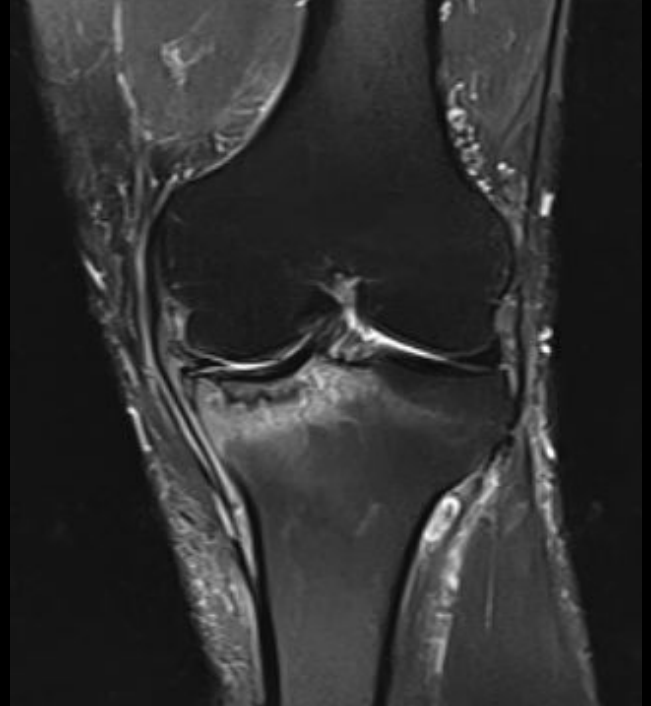
TRANSFORMED IMAGE QUALITY ON LEGACY SCANNERS

Siemens Skyra 3T | COR T2



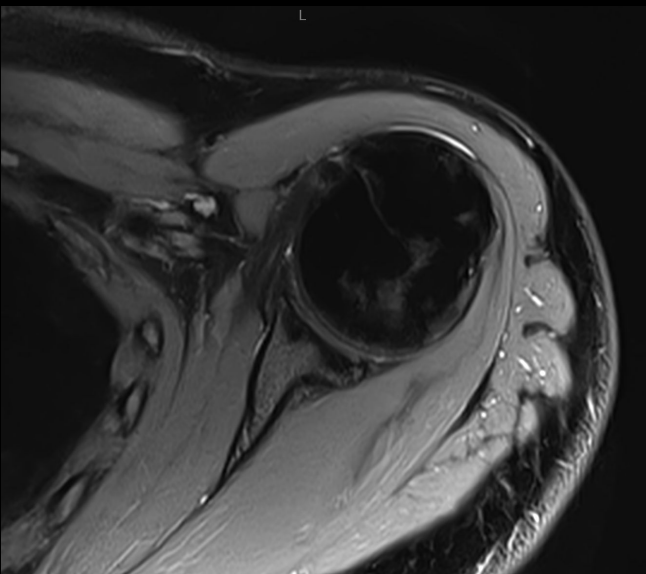
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Siemens Aera 1.5T | COR T2 FS



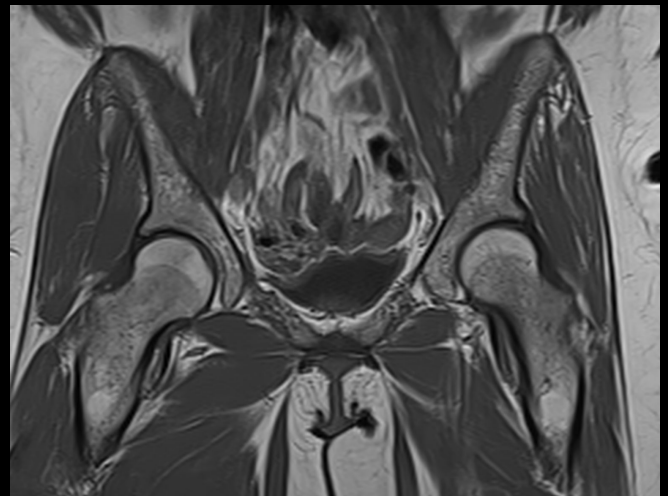
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Siemens Skyra 3T | AX PD FS



Acq. Time: **1:18**

Siemens Skyra 1.5T | COR T1



Acq. Time: **1:20**



Siemens Skyra 3T | SAG STIR



Acq. Time: **0:56**

Siemens Aera 1.5T | SAG T1



Acq. Time: **1:24**

MD FEEDBACK

“With SubtleHD, I’ve noticed an increase in sharpness and overall image quality. I get all that detail plus an on average 40% reduction in time scanning. This has allowed us to take our inpatient wait times down to zero, which is a significant win for the hospital.” Dr. Ajay Choudhri - Chairman of Radiology at Capital Health

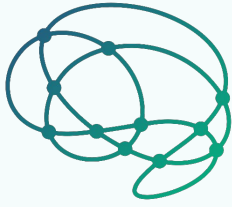
OPERATIONAL IMPACT

- ✓ Significant reduction in inpatient wait times
- ✓ Better staff and patient experience due to improved workflow
- ✓ More flexibility for STAT and ER/Observation requests
- ✓ Improved image sharpness and clarity on legacy scanners

LOOKING AHEAD

Capital Health currently uses SubtleHD on 2 of its MRI magnets and is planning to expand to a third and fourth system. The early success has positioned SubtleHD as a scalable solution for further increasing efficiency and patient access.





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About Subtle Medical

Subtle Medical, Inc. is an innovative healthcare technology company with a suite of software solutions that use deep learning to increase the quality and efficiency of medical imaging. Subtle's software solutions are integrated at hospitals and imaging institutions worldwide. It is a CB Insights Top AI 100 and two-time Digital Health 150 company. For more information, please visit subtlemedical.com or email sales@subtlemedical.com.

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MKT036 Rev. A.0 Effective 2025-08
Refer to the SubtleHD User Manual for full safety and use information

