

Chapter 5: Decision Aid Delivery

Sites integrate decision aids into their own workflow in different ways. Implementation teams will need to anticipate and overcome not only common barriers, but also clinic-specific barriers to ensure reliable delivery. Here we share short case studies that illustrate the experience of different sites that were part of the Orthopedic Shared Decision Making Learning Collaborative.

The following resources are included in this chapter:

Here are 14 participating sites case summaries. These summaries include information on site description, the implementation team, workflows, changes to workflow overtime, successes and barriers, and maintenance and sustainability.

5.1 Massachusetts General Hospital: Arthroplasty

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5.13 University of Rochester Medical Center: Arthroplasty

5.14 University of California, Los Angeles: Sport Medicine/Knee Osteoarthritis

5.1 Massachusetts General Hospital: Arthroplasty

Boston, MA

Contact: Hany Bedair, MD **Email:** hbedair@mgh.harvard.edu

Site description:	Arthroplasty service at academic medical center. Annual surgical volume of 1,200 patients.
Site champions:	Orthopedic surgeon, clinic manager
Implementation team description:	Clinic manager, front desk staff, schedulers
Prior experience with decision aids:	Prior experience with decision aids using paper copies and experience with electronic ordering
Decision aid used:	Healthwise (integrated into Epic and .pdf versions)
Decision aid delivery workflow:	<ul style="list-style-type: none"> Schedulers when booking a new patient order DAs for all new hip/knee patients of participating surgeons two weeks prior to visit . Front desk staff also ordered DAs for patients who are coming in for a new visit who may have been missed
Major changes to workflow over time:	<ul style="list-style-type: none"> Schedulers were ordering, but the workflow changed last year. Front desk started assisting with the ordering, but there were other priorities, so the ordering was put on the back burner.
Keys to success:	<ul style="list-style-type: none"> Having the schedulers ordering as they add new patients to the clinic schedule made it very easy to get the DA into patient hands. Once this processed changed a bit, the front desk started assisting and it was very helpful that any patients missed, would be sent the DA. It was a team effort.
Barriers:	<ul style="list-style-type: none"> Turnover of staff that made it hard to keep continuity of ordering. Staff who were trained left and new staff did not get onboarded to order Other pressing MGH initiatives that were priorities, so made it difficult to add this task to staff members.
Wishlist:	<ul style="list-style-type: none"> Better streamline ordering the DAs
Maintenance and sustainability:	<ul style="list-style-type: none"> Practice manager is working on a plan to have a team member champion these efforts of ordering the DAs prior to the patient visit. The call center will now be in charge of scheduling patients, so there needs to be someone in clinic and on staff to be responsible to order the DAs. Practice Manager will setup meeting to introduce the DA to new staff as part of the hiring process
Reach:	1,278 OA DAs given 40% OA reached

5.2 Massachusetts General Hospital: Spine Boston, MA

Contact: Thomas Cha, MD **Email:** tcha@mgh.harvard.edu

Site description:	Spine Service at academic medical center with 8 spine surgeons, 1 Physician Assistant (PA). Annual surgical volume of 400.
Site champions:	Orthopedic Surgeon
Implementation team description:	Research Coordinator
Prior experience with decision aids:	Prior experience with decision aids using paper copies and experience with electronic ordering
Decision aid used:	Healthwise (integrated into Epic and .pdf versions)
Decision aid delivery workflow:	<ul style="list-style-type: none"> • PA reviews patient schedule 1 week prior to new patient visit and emails the Research Coordinator with the list of names whom they should order a DA for. • Research Coordinator goes into EPIC and orders the DA for patient and it sends link to patient portal
Major changes to workflow over time:	<ul style="list-style-type: none"> • Research Coordinator stopped ordering DAs with pilot study ended and no DAs were being ordered since Oct 2022
Keys to success:	<ul style="list-style-type: none"> • Good communication between PA and Research Coordinator on a weekly basis to ensure all patients who were eligible for DA were being sent DA • Research Coordinator's time effort to committing to ordering and tracking the DAs
Barriers:	<ul style="list-style-type: none"> • If PA was out of office or Research Coordinator than no DAs were ordered
Wishlist:	<ul style="list-style-type: none"> • Better streamline ordering process
Maintenance and sustainability:	<ul style="list-style-type: none"> • Research Coordinator will continue to order DAs for patients after surgeon or PA reviews patients and deems them eligible to receive a DA prior to visit
Reach:	176 spine DAs given 17% spine reached

5.3 Brigham and Women's Hospital: Arthroplasty

Boston, MA

Contact: Dr. Antonia Chen **Email:** afchen@bwh.harvard.edu

Site description:	Arthroplasty service at academic medical center with 5 different physical locations where patients are seen. Annual surgical volume about 1,300.
Site champions:	Orthopedic surgeon, clinic manager
Implementation team description:	Clinic manager, operations supervisor, Medical Assistants (MAs)
Prior experience with decision aids:	Prior experience with DAs using paper copies and some experience with electronic ordering. Ordering stopped during COVID.
Decision aid used:	Healthwise (integrated into Epic and PDF versions)
Decision aid delivery workflow:	<ul style="list-style-type: none"> • MAs look ahead a week and order DAs for all new hip/knee patients of participating surgeons. • Every day, MAs will look for add on appts and will send out those DAs, in addition to the previous step. • DAs sent via patient portal and order is tracked in Electronic Health Record.
Major changes to workflow over time:	<ul style="list-style-type: none"> • First workflow was paper-based, day of visit and MAs would give DA to patient when rooming. • Transitioned to electronic workflow once surgeons were more comfortable. • Started with main campus and then added satellite locations
Keys to success:	<ul style="list-style-type: none"> • Automated process that it is driven almost entirely by MAs • DA ordering is part of the on boarding of new staff • Buy-in from the staff and administrators (front desk and MAs) was critical • Initially offering some flexibility to surgeons to opt-out or adjust workflow helped to get buy-in from surgeons (i.e. it wasn't a mandate that they use the DAs)
Barriers:	<ul style="list-style-type: none"> • Turnover of MAs (every 1-2 years full turnover of staff) that makes it hard to keep continuity • Integration into telemedicine visits was difficult (little to no ordering during COVID) • Growing pains at beginning as they tried different models to figure out the best way to integrate into workflow • Process does breakdown and some patients are missed when staff are out (e.g. 3 MAs called out sick same day) and then missed the add-ons.
Wishlist:	<ul style="list-style-type: none"> • If someone else could assign DAs, it would make it easier. Get EPIC to automate system to send DA would streamline middle person ordering DAs • The key factor is reminding people of why we are doing it, so having that resource would be great. Regular meetings with staff can help, but are time and resource intensive
Maintenance and sustainability:	<ul style="list-style-type: none"> • Efforts will continue with MAs ordering the DAs for patient prior to visit. Each MA has a surgeon they are assigned to (rotates daily), so they will order the DA for all eligible patients

Reach:	2,498 OA DAs given 72% OA reached

5.4 Newton Wellesley Hospital Arthroplasty at Kaplan Center Newton, MA

Contact: Hany Bedair, MD **Email:** hbedair@mgh.harvard.edu

Site description:	Arthroplasty service at academic medical. Annual surgical volume of approximately 950.
Site champions	Orthopedic surgeon, clinic manager
Implementation team description:	Clinic manager, MAs, Front desk staff
Prior experience with decision aids:	Prior experience with decision aids using paper copies and some experience with electronic ordering. Ordering stopped in the fall with significant staff turnover.
Decision aid used	Healthwise (integrated into Epic and .pdf versions)
Decision aid delivery workflow:	<ul style="list-style-type: none"> • Front desk staff booking all new hip/knee patients of participating surgeons order a DA • DAs sent via patient portal and paper copy given to patient at new patient visit
Major changes to workflow over time:	<ul style="list-style-type: none"> • Ordering stopped when head front desk champion went on medical leave and other staff members left Kaplan Center
Keys to success:	<ul style="list-style-type: none"> • Automated process driven entirely by front desk staff members • DA ordering is part of the on boarding of new staff • Buy-in from the staff and administrators (front desk and MAs) was critical
Barriers:	<ul style="list-style-type: none"> • Turnover of front desk makes it hard to keep continuity
Wishlist:	<ul style="list-style-type: none"> • More staff to support efforts consistently, but just hired several new staff members who will support the DA implementation efforts
Maintenance and sustainability:	<ul style="list-style-type: none"> • To ensure all new staff members complete decision aid ordering training when newly hired. Point one person as lead on efforts to ensuring DAs are ordered for patients prior to visit and DA paper copies are printed and at front desk to hand to patient upon check-in
Reach:	996 OA DAs given 20% OA reached

5.5 Newton Wellesley Hospital: Spine

Newton, MA

Contact: Jessica Aidlen, MD **Email:** jaidlen@mgb.org

Site description:	Spine Service at academic medical center with 6 spine surgeons, 3 Physician Assistant (PA). Annual surgical volume of 200.
Site champions:	Orthopedic Surgeon, PA
Implementation team description:	Research Coordinator
Prior experience with decision aids:	Prior experience with decision aids using paper copies and experience with electronic ordering
Decision aid used:	Healthwise (integrated into Epic and .pdf versions)
Decision aid delivery workflow:	<ul style="list-style-type: none"> PA reviews patient schedule 1 week prior to new patient visit and emails the Research Coordinator with the list of names whom they should order a DA for. Research Coordinator goes into EPIC and orders the DA for patient and it sends link to patient portal
Major changes to workflow over time:	<ul style="list-style-type: none"> Research Coordinator stopped ordering DAs with pilot study ended and no DAs were being ordered since Oct 2022
Keys to success:	<ul style="list-style-type: none"> Good communication between PA and Research Coordinator on a weekly basis to ensure all patients who were eligible for DA were being sent DA Research Coordinator's time effort to committing to ordering and tracking the DAs
Barriers:	<ul style="list-style-type: none"> If PA was out of office or Research Coordinator than no DAs were ordered
Wishlist:	<ul style="list-style-type: none"> Better streamline the ordering process and not have a middle person screen patients to deem them eligible to order DAs
Maintenance and sustainability:	<ul style="list-style-type: none"> Need Research Coordinator to begin ordering DAs again to ensure they are getting into the hands of patients. PA will continue to review schedule weekly to be able to send names to Research Coordinator to order the DAs
Reach:	214 spine DAs given 21% spine reached

5.6 Boston Medical Center: Arthroplasty

Boston, MA

Contacts: Michael Kain, MD **Email:** Michael.Kain@bmc.org, Ayesha Abdeen, MD **Email:** Ayesha.Abdeen@bmc.org

Site description:	Arthroplasty service at academic medical center and safety net hospital. Diverse, multi-lingual, underserved patient population. Annual surgical volume for hip and knee osteoarthritis patients of
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	approximately 500
Site champions:	Orthopedic surgeon, research project manager
Implementation team description:	Three orthopedic surgeons, Research Project Manager, 3 months into project new chief of orthopedics also joined, Research Assistant
Prior experience with decision aids:	No formal prior experience.
Decision aid used:	Healthwise (.pdf/paper version)
Decision aid delivery workflow:	<ul style="list-style-type: none"> • Research Assistant/Project Manager prints decision aids and monitors inventory • Surgeon/PA determines eligibility • PA/resident gets the decision aid in patients' language, puts patient sticker on log to track delivery • Surgeon/PA/resident warm handoff to patient (during,) visit • Project Manager/Research Assistant tracks the delivery • Use of DA documented in patient chart
Major changes to workflow over time:	None.
Keys to success:	<ul style="list-style-type: none"> • Surgeon champion clearly emphasized importance, so staff figured out how to make it happen. • Having clear, written standard operating procedures supports coverage and on boarding new hires enable consistent delivery • Good communication among staff (e.g. did patient get DA, do we need more printouts)
Barriers:	<ul style="list-style-type: none"> • Need more manpower to implement • Workflow is critical and need all team support to make it happen • Few patients registered in MyChart or with email contact on file to make electronic delivery a viable option
Wishlist:	<ul style="list-style-type: none"> • Electronic access and/or integration into electronic medical record • Delivery prior to consult or even further upstream (e.g. in primary care) • Budget to support access to these tools and translation to multiple languages.
Maintenance and sustainability:	Continued using decision aids consistently after learning collaborative. Trying to secure longer term access to tools in multiple languages.
Reach:	863 total decision aids delivered 94% of eligible patients reached

5.7 Dell Medical School (University of Texas at Austin): Arthroplasty

Austin, TX

Contact: Prakash Jayakumar, MD **Email:** Prakash.jayakumar@austin.utexas.edu

Site description:	Multidisciplinary clinic providing comprehensive specialty condition based musculoskeletal care within an academic medical center that includes orthopaedic surgeons, advanced care practitioners, nutritionists, physical
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	<p>therapists, and behavioral health trained social workers.</p> <p>Patient population is diverse and includes those from underserved, vulnerable communities. Payment model includes a condition-based bundle payment arrangement.</p> <p>Annual surgical volume of approximately 100-150 patients with knee osteoarthritis undergoing total knee replacement surgery.</p>
Site champions:	Orthopedic Surgeon (Director of Clinical Research and Outcome Measurement), Orthopedic Fellow
Implementation team description:	Clinician champion, research fellow, project manager, and research coordinators (who assist in recruitment in clinic)
Prior experience with decision aids:	Yes, co-developed decision aid for knee replacement.
Decision aid used:	OM1 Joint Insights Shared Decision Tool
Decision aid delivery workflow:	<ul style="list-style-type: none"> • Delivery was part of research study where all new patients flagged prior to visit during a pre-clinic team huddle; research coordinators or Orthopedic Fellow will screen patients for eligibility. • Research staff approach patients and walk patients through the DA prior to the consultation.
Major changes to workflow over time:	<ul style="list-style-type: none"> • DA delivery reduced after formal study was completed.
Keys to success:	<ul style="list-style-type: none"> • Leadership support from the start of the project; saw the value in DAs in the multidisciplinary team approach.
Barriers:	<ul style="list-style-type: none"> • Initial efforts tied to a research study with a initial lengthy recruitment process (this improved over time after researchers became increasingly familiar with the process and developed work-arounds). Efforts to integrate into routine care challenged by institutional IT priorities and complexities around integration with both EMR and PRO measurement platform., but lack of buy-in (residual effect of surgeons viewing the DA as part of a research study) as it was time-consuming during the study. • Difficult to integrate a 3rd party platform into the institution's electronic health record; more time & money than anticipated, and platform has to be vetted by multiple cybersecurity processes and recent legislation around integration of cloud-based technologies into health systems (TX-RAMP process). • DA took considerable staff and patient time to complete in research context i.e., along with consent process and additional outcome measurement. Clinically integrated version of the tool aimed to overcome this barrier and be substantially more streamlined.
Wishlist:	<ul style="list-style-type: none"> • DA and EHR integration (wish they had started earlier, during the DA development e.g, mapping the integration approach in parallel).
Maintenance and sustainability:	<ul style="list-style-type: none"> • DA delivery is on pause as clinical team, IT, and DA vendor coordinate integration into the EHR and navigate TX-RAMP.

	<ul style="list-style-type: none"> Expanded DA implementation to San Antonio site (quality improvement focus as part of another research study (AHRQ R21 project).
Reach:	107 total decision aids delivered 41% of eligible patients reached

5.8 Hartford Hospital, Bone and Joint Institute: Spine Hartford, CT

Contact: Jesse Eisler, MD Email: jesse.eisler@gmail.com

Site description:	The Bone and Joint Institute at Hartford Hospital serves all musculoskeletal needs of individuals in Connecticut. There is 1 Orthopedic spine surgeon and 1 Nurse Practitioner who see patients. Annual surgical volume for herniated disc and spinal stenosis of approximately 111.
Site champions:	Orthopedic surgeon, Office Manager
Implementation team description:	Front Desk Staff members, MAs, NP
Prior experience with decision aids:	No formal prior experience.
Decision aid used:	Healthwise
Decision aid delivery workflow:	Two workflows: <ul style="list-style-type: none"> Added DAs to the standard check-out form. During or at end of visit, Surgeon or NP will circle on check-out form which DA patient should receive, and then front desk staff member will hand to patient at check-out Before visit, surgeon or NP will review patient material to see if they need a DA and if so, will bring and hand to patient DA during the visit Front desk staff will ensure there is always a sufficient supply of paper copies of the decision in the patient rooms
Major changes to workflow over time:	None.
Keys to success:	<ul style="list-style-type: none"> Understanding that patients who used the decision aid have better outcomes. Being a private practice by Dr. Eisler, he makes the final decision on the implementation process, so he did not have to go through a board or approval to ensure these efforts were done in the clinic.

Barriers:	<ul style="list-style-type: none"> ● Onboarding new staff members ● Forgetting to track DAs ● Not always sure who has received a DA (documentation of this does not occur)
Wishlist:	<ul style="list-style-type: none"> ● EPIC integration ● Free DAs
Maintenance and sustainability:	<ul style="list-style-type: none"> ● Cost of DAs and finding funding is difficult ● Accountability: Ending the official project will not hold us to continue to deliver and track DA usage especially not being able to utilize the HW decision aids ● This project has held us accountable with tracking monthly numbers
Reach:	<p>245 total decision aids delivered</p> <p>82% of eligible patients reached</p>

5.9 John Peter Smith (JPS) Health Network: Arthroplasty Fort Worth, TX

Contact: Russell Wagner, MD Email: rwagner@jpshealth.org

Site description:	JPS Health is a publicly funded organization and a county hospital in Fort Worth, Texas that is committed to advancing the health and wellbeing of residents of Tarrant County. Their comprehensive orthopedics group has 21 full time faculty members and 20 clinical members devoted to clinical care, teaching and resident education in all areas of orthopedic surgery. There are 5 surgeons on the team focused on joint replacement and spine surgery.
Site champions	Orthopedic surgeon, Clinic Manager
Implementation team description:	Clinic Manager, Nurse, Research Manager
Prior experience with decision aids:	None
Decision aid used	Healthwise
Decision aid delivery workflow:	<ul style="list-style-type: none"> ● All new patients receive a decision aid. The Nurse gives printed DA to patient prior to check-out
Major changes to workflow over time:	None
Keys to success:	<ul style="list-style-type: none"> ● No staff turnover

Barriers:	<ul style="list-style-type: none"> There are two surgeons utilizing the DA, but need buy-in from other surgeons to use the DA with their patients
Wishlist:	<ul style="list-style-type: none"> It would be helpful to have more information, such as a PowerPoint to present to other clinicians and leadership to assist in ensuring there is buy-in for the integration of the decisions.
Maintenance and sustainability:	<ul style="list-style-type: none"> To continue the current dissemination process of ensuring all eligible patients receive a decision aid at their visit
Reach:	<p>194 total decision aids delivered</p> <p>73% of eligible patients reached</p>

5.10 Kaiser Permanente Washington State: Arthroplasty Seattle, WA

Contact: Kathleen Paul, MD **Email:** kathleen.j.paul@kp.org

Site description:	The orthopedic service line has 27 staff surgeons and 15 physician assistants who see patients at 5 specialty clinical sites (in Seattle, Bellevue, Tacoma, Olympia, and Silverdale).
Site champions:	Orthopedic surgeon, Primary Care Physician Champion (Clinical Lead within our Clinical Knowledge Development and Support department)
Implementation team description:	Total Joint Program Manager, MAs
Prior experience with decision aids:	Extensive prior experience with decision aids with electronic integration; however, transitioned to new DA vendor during this project
Decision aid used:	Health Dialog, then EBSCO Option Grids, then Healthwise
Decision aid delivery workflow:	<ul style="list-style-type: none"> For each new patient, Surgeon reviews reason for referral, if patient is eligible, Surgeon will open DA in chart and review it with patient and print it or add link in after visit summary For some surgeons, the MA will print DA to give to patient Printed copies of the DA are also available to be handed to a patient alternatively
Major changes to workflow over time:	<ul style="list-style-type: none"> Changed DA vendors during project with different IT integration and access With new DAs, access was mainly during the visit
Keys to success:	<ul style="list-style-type: none"> Being able to use Ebsco to get some DAs out to patients throughout the LC We didn't get to where we wanted to, but learned a lot from vendor transition and new vendor that will help us in the future
Barriers:	<ul style="list-style-type: none"> Lack of buy-in from primary care and orthopedics due to lack of funding for training on how to order DA and competing organizational priorities. Difficult to use during a visit as it was too many clicks in EPIC. Documentation was not captured clearly with new vendor, so it was difficult to track automatically in EMR

Wishlist:	<ul style="list-style-type: none"> Buy-in from surgeons on the specific DA Better access and tracking for DAs in EHR
Maintenance and sustainability:	<ul style="list-style-type: none"> Difficult to maintain, as surgeons prefer Healthwise tool and prefer handing out paper version versus trackable electronic version.
Reach:	557 total decision aids delivered 36% of eligible patients reached

5.11 NYU Langone Health: Arthroplasty

New York, NY

Contacts: Matthew Hepinstall, MD, **Email:** matthew.hepinstall@nyulangone.org

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Site description:	<p>One orthopedic practice with two* surgeons within a larger academic medical center of 30 orthopedic surgeons, clinical fellows, residents, and physician assistants. Serves a diverse cultural and socioeconomic patient population from the greater New York metro area.</p> <p>Annual surgical volume of 895 for surgeons involved in this project.</p>
Site champions:	Orthopedic surgeon, Project Manager
Implementation team description:	Two orthopedic surgeons; two project managers; PA; medical students/fellows
Prior experience with decision aids:	No
Decision aid used:	Healthwise
Decision aid delivery workflow:	<ul style="list-style-type: none"> Current workflow (electronic workflow): Surgeon reviews clinic schedule in advance; sends Epic message with link to online version of DAs to patients prior to the visit. Surgeon provides additional, surgery-specific materials to patients post-visit. For patients who decide not to undergo surgery, they receive paper DA. No tracking – slows down delivery process and timing was too late, so switch to electronic, pre-visit delivery mode.
Major changes to workflow over time:	<ul style="list-style-type: none"> 1st workflow (paper workflow): with first clinician champion, DA tracking data was captured manually via paper; tracking became too difficult to sustain once site no longer had PAs to support in clinic. Priority was to continue delivering DAs even if there wasn't tracking 2nd workflow (paper workflow): PA/MA prints clinic schedule; also prints copies of DAs to leave on surgeon's desk. Surgeon determines if patient is eligible during consultation; if eligible, highlights patient's name and delivers a copy of the DA. Warm handoff usually done by surgeon.

Keys to success:	<ul style="list-style-type: none"> • New patients who receive DA before visit seem to find it more helpful. • Surgeon/practice was already providing patients with educational materials post-visit, so easy to add the paper DA to the 1st and 2nd day-of-visit workflow models.
Barriers:	<ul style="list-style-type: none"> • Change in *clinician champion and temporary change in administrative champion midway through project. PA (staff turnover and for 6 months did not have PA as part of time). • Tracking (for purposes of Learning Collaborative reporting) slowed down the process. • Many patients had already made their decision prior to receiving the DA at the surgical consultation.
Wishlist:	<ul style="list-style-type: none"> • Better understanding of who would find the DAs helpful (patients prior to making the decision). • Modifiable DA to individualize and personalize with patients and edit with what content they'd like.
Maintenance and sustainability:	<ul style="list-style-type: none"> • Difficult as they work in a union office and additional tasks are not easy to add to job descriptions. • Staff and leadership turnover across sites made it difficult to sustain. • Don't want to pay for DAs, as there are other similar educational materials through EPIC.
Reach:	60 total decision aids delivered 5% of eligible patients reached

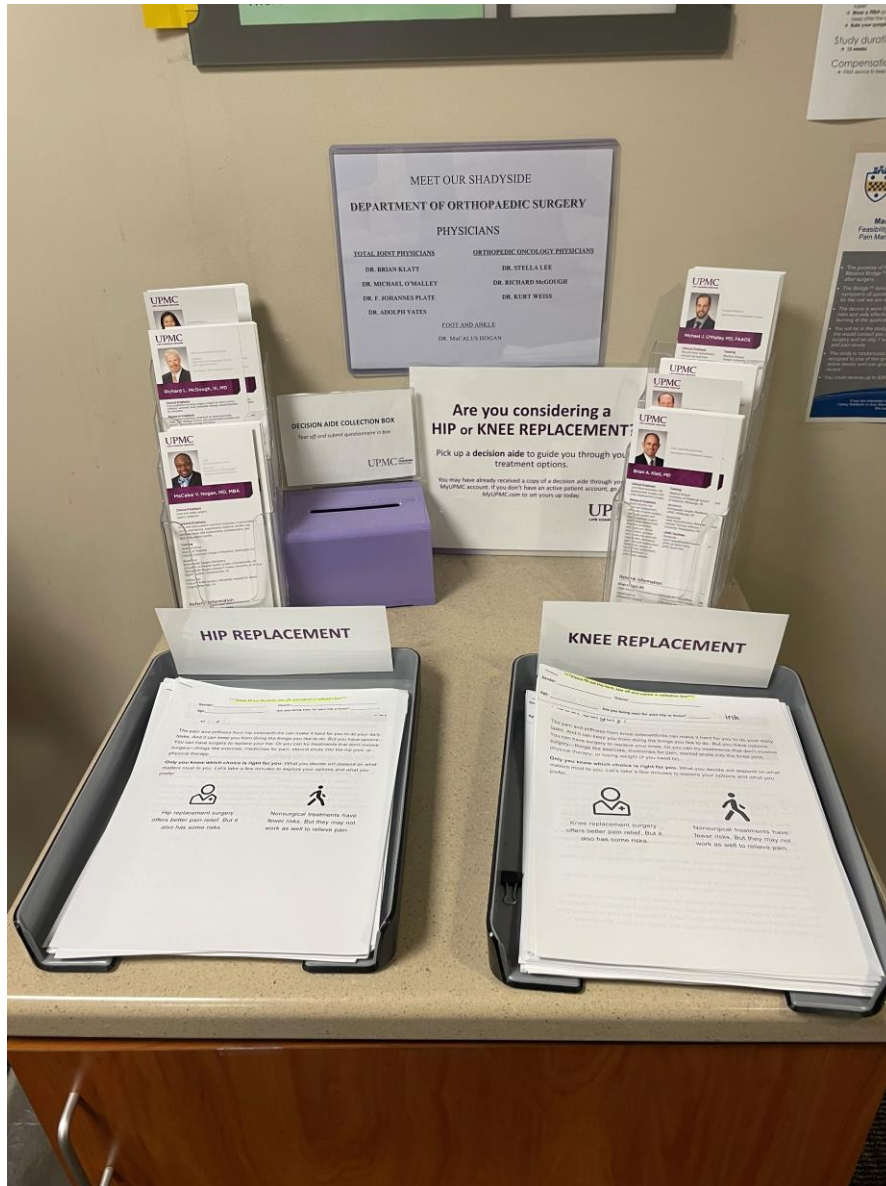
5.12 University of Pittsburgh Medical Center: Arthroplasty Pittsburgh, PA

Contact: Adolph Yates, MD Email: yatesaj@upmc.edu

Site description:	The Orthopedics department has a multidisciplinary team of experts who provide care for everything from severe osteoarthritis to mild ankle sprains in the context of the patient's overall health and goals. The Orthopedic team partnered with The Wolff Center at UPMC for this initiative. The Wolff Center is the voice of quality patient care and improvement at UPMC.
Site champions:	Orthopedic surgeon, Clinic nurse
Implementation team description:	Clinic Nurses, Senior Manager for Patient Education & Communications played an important role in attending monthly meetings and LC sessions
Prior experience with decision aids:	Yes-Wolff Center supports SDM and DAs across practices and specialties, but no prior experience with orthopedic DAs
Decision aid used:	Healthwise (integrated into Epic and .pdf versions)
Decision aid delivery workflow:	<ul style="list-style-type: none"> • Nurse opens EPIC and reviews all new pts and follow-up pts to see who is eligible • If patient is eligible, Nurse will open a new encounter in EPIC chart, search for DA, order for knee and hip DA, sign order and click out of

	<p>chart</p> <ul style="list-style-type: none"> • Self kiosk: Nurse will print and replenish paper copies of the DAs in the self-Kiosk in waiting room once a week
Major changes to workflow over time:	<ul style="list-style-type: none"> • Smartphrases were developed that enable documentation of DA and SDM conversation in EPIC notes and then saved in the synopsis section of Epic in a way that can be retrieved longitudinally per patient as well as collectively
Keys to success:	<ul style="list-style-type: none"> • Clinical champion has made it very clear to staff that there is a self-interest to make this happen (similar to HOOS and KOOS jr scores). Everyone on team is onboard • Monthly report of how many tools are delivered by surgeon; small level analysis pushes surgeons to deliver more DAs. • Smartphrase for EPIC documentation • Wolf Center really helped set up for success; we started with Dr Yates one office on location; then moving to other docs; allowed us to feel like we were succeeding, showed Wolff that we were serious and then could build on that when we expanded; helped get trust level high • Fortunate that wolf center has leverage within institution; so approaching IT people and getting things through Epic was possible; as individual surgeon would not have been able to make things happen
Barriers:	<ul style="list-style-type: none"> • Staff turnover • Biggest barrier is at surgeon level is that there are too many clicks already, so they do not want added clicks to have to remember to order the DAs in EPIC. They are already doing a lot in visit, so do not want added tasks • Expansion to all Total Joint offices and surgeons as well as other sub-specialties
Wishlist:	<ul style="list-style-type: none"> • Dedicated staff to order and discuss DAs with patients and buy-in from all surgeons to get the DAs into the hands of patients
Maintenance and sustainability:	<ul style="list-style-type: none"> • Has been sustainable because implementation team members have been dedicated to ensuring DAs are ordered for patients prior to visit and self-kiosk with paper DAs are always replenished • Presented to leadership – and finally have two smartphrases that will enable documentation of the DA and the SDM conversation in epic.
Reach:	<p>1205 total decision aids delivered 63% of eligible patients reached</p>

Below is an example of a self-kiosk in the waiting area for patients to take a decision aid while waiting for their appointment:



**5.13 University of Rochester Medical Center: Arthroplasty
Rochester, NY**

Contact: Benjamin Ricciardi, MD Email: Benjamin_ricciardi@urmc.rochester.edu

Site description:	Academic orthopedic practice with two participating surgeons within a larger academic medical center. It serves a diverse, underserved patient population who speak English and/or Spanish. Annual surgical volume of 800.
Site champions:	Orthopedic surgeon
Implementation team description:	Surgeon, RN, Secretary. Several staff changes (not clinician champion) during the project time period.
Prior experience	No

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with decision aids:	
Decision aid used:	Healthwise
Decision aid delivery workflow:	<ul style="list-style-type: none"> • RN reviews schedule day before/day of clinic and highlights all new patients. • Secretary prints DA packets; RN delivers DA to patients during the rooming process. • Surgeon/RN does the warm handoff asking patients to review the DA
Major changes to workflow over time:	<ul style="list-style-type: none"> • None
Keys to success:	<ul style="list-style-type: none"> • Peers take care of the training of new staff (have had several complete turnover of staff and has not disrupted delivery). • Patients are receptive and it is not disruptive to the practice. • Buy in from surgeons at the site. • Self-contained clinic which is easier to control and oversee.
Barriers:	<ul style="list-style-type: none"> • Surprised at how hard it has been to get access to IT resources/prioritization, trying to get integrated into EMR to support standardization and scaling but no luck yet.
Wishlist:	<ul style="list-style-type: none"> • Expand at departmental level, to other 9 surgeons who take care of arthritis. • Move to electronic delivery and documentation to be more standardized and delivered to more people. • Get leadership buy-in to make investment in DA to support expansion.
Maintenance and sustainability:	<ul style="list-style-type: none"> • Continued to deliver decision aids during 6-month maintenance. • Modest amount of time ~10 min a week mostly just making sure we have printouts and explain to any new folks what to do. • Will need to gain leadership support (specifically funding) for contract to continue using Healthwise or explore another vendor; anticipate DA delivery to stop unless there is a contract extension or new contract.
Reach:	967 total decision aids delivered 48% of eligible patients reached

5.14 University of California, Los Angeles: Sport Medicine/Knee Osteoarthritis Los Angeles, CA

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Site description:	Department of Sports Medicine with 9 doctors housed in an academic medical center (UCLA). The center serves as a referral destination for all of UCLA Health primary care, including Internal Medicine, Family Medicine, Pediatrics as well as our Urgent Care clinics and Emergency Medicine sites. Annual eligible new patient volume of 3360.
Site champions:	Orthopedic surgeon, Sports Medicine clinician

Implementation team description:	Sports Medicine physicians, schedulers, project managers, Wisercare representatives
Prior experience with decision aids:	Yes, in other clinical area (prostate cancer treatment)
Decision aid used:	Wisercare (developed and tested new knee osteoarthritis module over the course of the implementation project)
Decision aid delivery workflow:	<ul style="list-style-type: none"> • Current workflow: Centralized process to 2 main support staff (i.e. manager). Manager reviews clinic schedule in advance of visit.(ideally ~2 weeks); identifies patients and opens each patient's EMR to order the DA • DA sent to patient in portal; patients review and complete the modules, and then responses sent back.
Major changes to workflow over time:	<ul style="list-style-type: none"> • 1st workflow: schedulers assigned to each surgeon screened for eligible patients; went into each patient's EMR individually to "assign" the Wisercare modules. However, difficult to train and get buy-in from each individual scheduler.
Keys to success:	<ul style="list-style-type: none"> • Staff's position in sports med helped deliver DAs. • Wisercare has existing relationship with UCLA and has experience integrating into HER.
Barriers:	<ul style="list-style-type: none"> • Key personnel left. • Difficult to get buy-in from different staff due to other priorities and staff restructuring that occurred during the project period.
Wishlist:	<ul style="list-style-type: none"> • Batch ordering for DAs that is automated in EHR is the goal (need to work with IT to make it happen). • Stable personnel to maintain delivery. • Programmer time funding for improved documentation or EHR work.
Maintenance and sustainability:	<ul style="list-style-type: none"> • Have the institutional knowledge to sustain but no bandwidth to do so.
Reach:	442 total decision aids delivered 11% of eligible patients reached