

DAVINCI by Intuitive

Da Vinci Residency and Fellowship Training Program Implementation Guide



Introduction

The da Vinci Residency and Fellowship Implementation Guide provides a systematized program in alignment with the da Vinci training pathways. Each phase is accompanied with applicable resources to help a lead educator plan a training curriculum for residents and / or fellows. All resources can be found in the da Vinci Online Community, davincisurgerycommunity.com, unless otherwise stated.

Phases in the guide include:

Phase 1
Introduction to da Vinci

Phase 2
Da Vinci Skills Drills Training

Phase 3
Intra-operative and advanced skills application

Phase 4
Da Vinci Case Participation
(Training Equivalency Certificate Pathway)

Resourced to Support Your Transition-to-Practice



Phase 1. Introduction to da Vinci

In each training phase, the following activities are recommended to support learners in developing proficiency in da Vinci surgery skills and practices. This guide can be used to implement a systematized program in alignment with the da Vinci training pathways. Please refer to each task below for additional instruction and applicable resources. All resources can be found in the da Vinci Online Community davincisurgerycommunity.com, unless otherwise stated. Any online training sets can be found in the Training section.

Complete da Vinci Surgical System Online Training, for Residents and Fellows

Aim to understand functions and features of da Vinci systems, instruments, and accessories

Topics may include system component overview and instruction in the use of system components, EndoWrist® instruments and accessories, and advanced options such as Single-Site® technology.

Time varies based on system course; self-guided.

Alternatively, da Vinci training videos are available through the Fundamentals of Robotics Surgery (FRS).

Resources

- Da Vinci Skills Tracker for Residents & Fellows (PN 1024649)
- Fundamentals of Robotics Surgery (FRS) Online Modules www.frsurgery.com

Review Two Full-Length Procedure Videos

Increase familiarity with the use of da Vinci and surgical best practices

Procedure videos help learners increase familiarity with the use of technology and surgical practices in da Vinci surgery.

Procedure cards and brochures are also available for select videos, which provide information on the set-up, procedure steps, and instruments and accessories used.

Time varies based on system course; self-guided

Resources

- Da Vinci surgery videos
- Da Vinci Skills Tracker for Residents & Fellows (PN 1024649)
- Da Vinci X System Overview In-Service Guide (PN 1033885)



Phase 1. Introduction to da Vinci

Complete da Vinci System Overview In-Service Training

Gain hands-on experience using the da Vinci system

Learners gain hands-on experience using the da Vinci system.

Three two-hour sessions; guided by experienced da Vinci surgeon or lead educator:

Session 1: System Component Overview, Docking, Port Placement

Session 2: Port Placement and Docking (repeat for practice),

EndoWrist® Instrument Overview, Surgeon Console Overview

Session 3: Surgeon Console Overview (repeat), Emergency Procedures,
Powering Off System

Resources

- Da Vinci Si System Overview In-service Guide (PN 210262)
or da Vinci Xi System Overview In-service Guide (PN 1007572)
- Da Vinci Skills Tracker for Residents & Fellows (PN 1024649)
- Da Vinci Skills Tracker for Residents & Fellows (PN 1024649)
- Da Vinci X System Overview In-Service Guide (1033885)

Complete da Vinci System Online Assessment

Demonstrate proficiency in understanding the basic functions and features of da Vinci systems, instruments, and accessories

Learners take an assessment using cumulative knowledge derived from the study of online training videos and procedural videos and the applications in the da Vinci System Overview In-Service Training.

Resources

- Da Vinci Skills Tracker for Residents & Fellows (PN 1024649)
- “How to Print a Certificate” Quick Reference Guide (PN 1015165)



Phase 1. Introduction to da Vinci

Complete da Vinci Skills Simulator Exercises

Demonstrate proficiency in da Vinci surgery skills at the Surgeon Console

Learners use the da Vinci Skills Simulator to build proficiency in da Vinci surgery skills at the Surgeon Console including EndoWrist manipulation, camera control, clutching, dissection, energy control, and needle control. Create a SimNow Link Account for users with access to SimNow.

Establish target performance scores for each exercise and progressively increase over the course of training phases (e.g., 80%, 85%, and 90% scores for Phase I, II, III, respectively).

If SimNow is available, encourage fellow to create a Link profile to track performance through their online dashboard. A set of recommended exercises can be recommended [a sample set provided within Skills Tracker (PN1024649)]

Self-guided; time varies based on time needed to achieve 80%, 85%, 90% scores for Phase I, II, III respectively.

Resources

- Da Vinci Skills Simulator administrator training sets (da Vinci Xi and da Vinci Si systems)
- For da Vinci Xi/da Vinci Si system: Skills Simulator Setup (PN 552269-02)
- For da Vinci Xi system: Skills Simulator Remote User Interface (PN 552270-02)
- Da Vinci Skills Tracker for Residents & Fellows (PN 1024649)
- Create a SimNow Link Account (PN 1049549)
- SimNow One Page Leave Behind (PN 1047821)



Phase 2. Da Vinci skills drills training

Complete da Vinci Skills Drills Practicum

Aim to demonstrate proficiency in use of the da Vinci system through core exercises

Learners complete hands-on core exercises involving port placement, patient cart setup, instrument insertion, EndoWrist manipulation, and suturing.

Two two-hour sessions:

Session 1: Attending physician facilitates the session to review core concepts covered during the Phase 1 in-service activity.

Session 2: Learners are assessed / demonstrate proficiency in the core exercises with minimal instruction by the attending physician (sample checklist included in PN 873872)

Resources

- da Vinci Surgeon Skills Drills Practicum & Setup Guide (PN 873872)
- da Vinci Skills Tracker for Residents & Fellows (PN 1024649)

Complete da Vinci Skills Simulator Exercises

Demonstrate proficiency in da Vinci Surgery skills at the Surgeon Console

Learners continue to frequently practice hands-on exercises on the Skills Simulator.

Establish target performance scores for each exercise and progressively increase over the course of training phases (e.g., 80%, 85%, and 90% scores for Phase I, II, III, respectively).

Self-guided; time varies based on time needed to achieve 80%, 85%, 90% scores for Phase I, II, III respectively

Resources

- da Vinci Skills Simulator administrator training sets (da Vinci Xi and da Vinci Si systems)
- Skills Simulator Metrics Definitions and Feedback Guide (PN 1000907)
- Da Vinci Si/da Vinci Xi Skills Simulator Setup (PN 552269-02)
- Da Vinci Xi Skills Simulator Remote User Interface (PN 552270-02)
- Da Vinci Skills Tracker for Residents & Fellows (PN 1024649)
- Create a SimNow Link Account (PN 1049549)

Complete da Vinci Surgery Case Observations

Increase familiarity with the use of da Vinci systems, instruments, and accessories, and surgical best practices

Learners are encouraged to observe da Vinci surgery procedures relevant to their surgical specialties or program curriculum.

Procedure cards and brochures are also available for select procedures, which provide information on the set-up, steps, and instruments and accessories used. Time varies based on procedure; self-guided

Resources

- Da Vinci surgery procedure cards and brochures
- Da Vinci Skills Tracker for Residents & Fellows (PN 1024649)



Phase 3. Intra-operative and advanced skills application

Complete da Vinci Online Advanced Instrument Course and Assessment

Identify terminology, functions, and safety features of advanced instrument and accessories

Learners complete online system-specific advanced instrument courses and assessments relevant to their procedures (e.g., da Vinci Stapler 45 instrument for the da Vinci Si system).

Time varies based on course; self-guided; learners receive a certificate of completion upon passing assessment

Resources

- "How to Print a Certificate" Quick Reference Guide (PN 1015165)
 - Da Vinci Skills Tracker for Residents & Fellows (PN 1024649)
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Complete da Vinci Surgeon Skills Drills Practicum, Suturing Topics

Build proficiency in suturing techniques with the use of the da Vinci surgical system

Learners engage in practice of the two-handed suturing technique, the one-handed technique, and the running suture.

One 1-hour session; one 1.5-hour session; self-guided or guided by experienced da Vinci surgeon or lead educator

Resources

- Da Vinci Surgeon Skills Drills Practicum & Setup Guide (PN 873872)
 - Da Vinci Skills Tracker for Residents & Fellows (PN 1024649)
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Complete da Vinci Skills Simulator Exercises (Additional Practice)

Aim to build proficiency in suturing techniques with the use of the da Vinci Surgical System

Learners continue to frequently practice the hands-on exercises using the Skills Simulator.

Establish target performance scores for each exercise and progressively increase over the course of training phases (e.g., 80%, 85%, and 90% scores for Phase I, II, III, respectively).

Self-guided; time varies based on time needed to achieve 80%, 85%, 90% scores for Phase I, II, III, respectively

Resources

- Da Vinci Skills Simulator administrator training sets (da Vinci Xi and da Vinci Si systems)
- Skills Simulator Metrics Definitions and Feedback Guide (PN 1000907)
- Da Vinci Si/da Vinci Xi Skills Simulator Setup (PN 552269-02)
- Da Vinci Xi Skills Simulator Remote User Interface (PN 552270-02)
- Da Vinci Skills Tracker for Residents & Fellows (PN 1024649)



Phase 3. Intra-operative and advanced skills application

Perform da Vinci Procedures in Primary Role of Bedside Assistant

Demonstrate proficiency in the surgical role of bedside assistant during da Vinci surgical system

Learners assist in da Vinci procedures relevant to their surgical specialties or program curriculum.

Learners can log all of their da Vinci cases to the da Vinci Case Tracker in the da Vinci Surgery Community (Log-in > Click User Name > Click My Cases)

Complete a minimum of 5 da Vinci procedures; 10 procedures are required for the training equivalency certificate.

Resources

- Da Vinci Skills Tracker for Residents & Fellows (PN 1024649)
- Da Vinci Case Tracker One Pager (PN Document Currently in Development)



Phase 4. Da Vinci case participation

(Training Equivalency
Certificate Pathway)

Perform da Vinci Procedures in Primary Role of Console Surgeon

Aim to demonstrate proficiency in the surgical role of console surgeon during da Vinci surgery

Learners perform da Vinci procedures relevant to their surgical specialties or program curriculum in the role of console surgeon.

Complete a minimum of 10 da Vinci procedures; 20 procedures are required for the training equivalency certificate.

Resources

- Da Vinci Skills Tracker for Residents & Fellows (PN 1024649)
- Da Vinci Case Tracker One Pager (PN Document Currently in Development)

Perform da Vinci Procedures in Primary Role of Bedside Assistant

Aim to demonstrate proficiency in the surgical role of bedside assistant during use of a da Vinci Surgical System

Learners continue to assist in da Vinci procedures relevant to their surgical specialties or program curriculum.

Complete a minimum of 5 da Vinci procedures; 10 procedures are required for the training equivalency certificate.

Resources

- Da Vinci Skills Tracker for Residents & Fellows (PN 1024649)
- Da Vinci Case Tracker One Pager (PN Document Currently in Development)

Solicit a Letter of Verification of da Vinci System Training and Procedures Completed

Verify participation in da Vinci training and procedures completed

Learners sign and submit the da Vinci Skills Activity Tracker for Residents & Fellows to the chief of surgery or residency/fellowship program director who can attest to their completion of training and procedures.

Self-guided; upon completion of da Vinci training and surgical procedures performed

Resources

- Data Sheet, da Vinci Residency & Fellowship Training Equivalency Certificate Requirements (PN 210352)
- Resident & Fellow Training Equivalency Letter template (PN 210354)
- Da Vinci Skills Tracker for Residents & Fellows (PN 1024649)



Resources to support a learner's transition to practice

The following are resources designed to assist residents and fellows while transitioning to practice.

The da Vinci Job Board is designed to connect residents and fellows with prospective employers who offer da Vinci surgery. Learners can showcase their experience, search for the latest job openings, and connect with hiring managers.

Learners can access the Job Board by logging into the da Vinci Online Community and clicking Community → Job Board

Resources

- Da Vinci Skills Tracker for Residents & Fellows (PN 1024649)
- “How to Print a Certificate” Quick Reference Guide (PN 1015165)
- Job Board One-Pager for Job Seekers (PN 1042784)

A Guide for Graduating Residents and Fellows

This resource was designed to provide graduating fellows with a sample of topics to consider when researching prospective da Vinci programs that fit their individual needs.

A helpful checklist covers topics such as program background, advanced technology, da Vinci system access, and continued education support that are important in selecting a program that matches the needs of the resident/fellow.

Resources

- A Guide for Graduating Residents and Fellows (PN 1034479)
- Job Board One-Pager for Job Seekers (PN 1042784)



Important safety information

Serious complications may occur in any surgery, including da Vinci® Surgery, up to and including death. Examples of serious or life-threatening complications, which may require prolonged and/or unexpected hospitalization and/or reoperation, include but are not limited to, one or more of the following: injury to tissues/organs, bleeding, infection and internal scarring that can cause long-lasting dysfunction/pain.

Risks specific to minimally invasive surgery, including da Vinci® Surgery, include but are not limited to, one or more of the following: temporary pain/nerve injury associated with positioning; a longer operative time, the need to convert to an open approach, or the need for additional or larger incision sites. Converting the procedure could result in a longer operative time, a longer time under anesthesia, and could lead to increased complications. Contraindications applicable to the use of conventional endoscopic instruments also apply to the use of all da Vinci instruments.

For Important Safety Information, indications for use, risks, full cautions and warnings, please also refer to www.davincisurgery.com/safety and <http://www.intuitive.com/safety>

Individuals' outcomes may depend on a number of factors, including but not limited to patient characteristics, disease characteristics and/or surgeon experience.

Training provided by Intuitive Surgical is limited to the use of the da Vinci Surgical System, instruments and accessories. It does not replace the necessary medical training and experience required to perform surgery. The da Vinci surgical system should only be used by surgeons and staff who have received specific training in the use of the da Vinci surgical system. Prior to using any training materials, refer to the da Vinci Online Community to ensure you are using the most up to date revision.

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