

# Structured Data Capture (SDC)

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## Problem

The use of electronic health record (EHR) data for secondary purposes is limited due to a lack of uniformity in data structure, transport, and definitions across EHR systems. Streamlining EHR data in a structured way can accelerate determination of coverage, quality and safety improvements, improve population health, and foster scientific research.<sup>1</sup>

## Project Objective

The Structured Data Capture (SDC) Initiative provides a standards-based infrastructure for the capture and use of patient-level data in EHR systems for adverse event reporting, public health reporting, and scientific research. The initiative adopted and enhanced four national standards specific to common data elements (CDEs) used in filling, structuring, or designing electronic forms/templates; standardizing EHR interaction functions; auto-populating forms/templates; and transporting structured data between systems.<sup>1</sup>

## Project Description

The SDC Workflow steps include: (1) a Form Filler requests a form/template from a Form Manager; (2) a Form Manager sends the requested form/template to the Form Filler; (3) the Form Filler converts, populates, and displays the form; (4) the Form Filler stores/transmits the structured data to an external data repository; (5) upon request, the external data repository extracts, transforms, and sends the completed structured data to the end user.<sup>1</sup> Three pilot teams successfully completed end-to-end testing of multiple forms using the SDC architecture<sup>2,3,4</sup>. The three forms are as follows: FormDesign, RequestForm and SubmitForm.

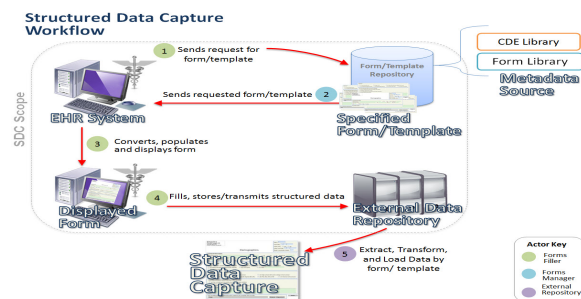


Figure 1. SDC Workflow<sup>1</sup>

## Conclusion

SDC forms are an efficient mechanism to achieve interoperability with standardized structured clinical content. This project was funded by the Patient-Centered Outcomes Research (PCOR) Trust Fund, managed by the Office of the Assistant Secretary for Planning and Evaluation (ASPE) in the U.S. Department of Health and Human Services.

## References

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