Integrating the Healthcare Enterprise

IHE Cardiology (CARD)
White Paper

Cardiac Procedure Note (CPN)
Companion Guide
Executive Overview

Revision 1.0 – Draft for Public Comment

Foreword

This is a white paper of the IHE Cardiology Domain.

30   This white paper is published on August 17, 2018 for Public Comment. Comments are invited and can be submitted at https://www.ihe.net/Cardiology_Public_Comments/. In order to be considered in development of the subsequent version of the white paper, comments must be received by September 16, 2018.

General information about IHE can be found at: www.ihe.net.

35   Information about the IHE Cardiology domain can be found at: ihe.net/IHE_Domains.

Information about the organization of IHE Technical Frameworks and Supplements and the process used to create them can be found at: http://ihe.net/IHE_Process and http://ihe.net/Profiles.

The current version of the IHE Cardiology Technical Framework can be found at:
40   https://www.ihe.net/Technical_Frameworks.

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1 Introduction

This document, the IHE Cardiology Cardiac Procedure Note (CPN) Companion Guide Executive Summary White Paper, describes how a chief executive officer would use the IHE CPN Profile to drive interoperability in their health system and the healthcare ecosystem.

1.1 Purpose of the Cardiac Procedure Note (CPN) Companion Guide Executive Overview White Paper

This document provides an Executive Level Companion guide to highlight real world operational applications for how the CPN Profile may enhance hospital operations. Intended audiences include senior executives who are not experts in informatics. The clinical section, which is still under development, will highlight clinical examples that will draw the interest of the Cardiovascular Leaders who are also not experts in informatics.

There is a lack of awareness around the benefits of the CPN Profile, which includes helping many facilities, care providers, and patients use health care resources more efficiently and cost effectively.

This white paper is intended to build general awareness and encourage implementation of the CPN Profile.

1.2 Intended Audience

The intended audience of the IHE Cardiology CPN Companion Guide White Paper is:

- *Executive Physician Leader (CMO, CMIO)*
- *Senior/Executive Administrative Leader (CEO, COO, CFO)*
- *Those interested in integrating healthcare information systems and workflows*

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2 Executive Summary

95 A plethora of informatics solutions exists in today's healthcare environment. Leveraging the Integrating the Healthcare Enterprise (IHE) Cardiac Procedure Note (CPN) Profile, developed by an interdisciplinary team of physicians, healthcare administrators and industry leaders utilizing current data standards, will provide your organization with a powerful tool to positively impact clinical outcomes and financial performance to improve organization risk.

2.1 How and when does a healthcare leader use the IHE CPN Profile?

100 Support for IS/IT, Physicians and CV Administrators to include the IHE-CPN Profile in strategic decision making for future:

- When assessing existing infrastructure

- Prior to significant capital purchase

105 - When soliciting Request for Information (RFI)/Request for Proposals (RFP)

Advocate with internal administrators and physician leaders for change management to drive adoption and adherence of the IHE-CPN Profile through education, resource allocation and accountability.

2.2 What is the IHE-CPN Profile?

110 The CPN is a vendor neutral standardized structured report format for use in Cath and EP labs with a goal of increasing efficiencies while reducing implementation work effort and cost.

The CPN facilitates more efficient and consistent documentation to allow for the robust data analysis required to safeguard patient safety, improve clinical outcomes and meet regulatory requirements.

115 And, the CPN is more than data standards. It facilitates the capture of high-quality data efficiently. The improved data integrity that comes with CPN use underpins broader organizational goals for the Cath and EP labs allowing organizations to continually improve clinical, financial and operational performance.

2.3 Why is the IHE-CPN Profile important?

120 Free-formed unstructured reports, or structured reports that don't include the data used to create them, permit omission of requisite information and require labor-intensive manual data extraction to assess clinical outcomes, resource utilization and lab operational performance. Furthermore, unstructured reporting may not even be capturing the necessary data to perform such analyses and inadvertently facilitate regulatory non-compliance. By creating a structured

125 CPN, data can be more easily entered if not captured automatically thereby reducing provider and administrative burden and automate assessments that can drive improved financial performance (e.g., cost and margin analysis, inventory management, charge capture), operational efficiency (e.g., more effective staff training, process bottleneck identification), and quality (e.g.,

130 leverage clinical decision support, transparent communications for transitions of care, outcomes analysis).

The improved data integrity that comes with CPN use underpins broader organizational goals for the Cath and EP labs. Utilizing available data standards to develop and implement vendor neutral Electronic Health Information Systems (i.e., CVIS) products with a goal to increase efficiencies, reduce implementation work effort and cost. Adoption of standards: data sets and workflow to 135 increase financial performance, adherence regulatory requirements, quality outcomes and patient safety.

The results expected can be the following:

Financial Performance

- Cost and Margin Analysis

140 - Optimal Reimbursement
    - o Inventory Management
    - o Procedure Billing
- Staffing Models
    - o Adherence to standard workflow to decrease staff orientation/onboarding/education
145 - o Transition from manual data abstraction to data validation external reporting

Regulatory Compliance

- Standard documentation approach such as structured note, ensures regulatory compliance and allows for increase agility for real-time updates to meet external requirements.
- Improve data integrity for external reporting.

150 - Increase staffing efficiencies needed to complete data collection to external stakeholders.

Quality/Outcomes

- Increase data collection efficiency to provide real-time feedback for improved patient outcomes
- Leverage decision support capabilities to reduce unwarranted variation for clinical care.

155 Patient Safety

- Consistent patient hand-offs during episode of care
- Clear communication to providers during the episode and post-discharge to support transparency during the continuum of care
- Data standards and interoperability allows for patients to be monitored from a
160 longitudinal perspective

- Increase transparency to patient specific longitudinal tracking:
  - Lifetime radiation exposure
  - Unique Device Identifiers (UDI)

Glossary

165   The complete IHE Glossary is available here.

Term	Definition
Controlled Vocabulary	Terminology that is managed and curated by a group, such as the National Library of Medicine, that limits ambiguity and ensures concise clinical documentation and communications.
Data Integrity	Ensuring that information is accurate and consistent between collection, sources of storage, and use.
Structured Report	A concise, clinical document that contains pre-determined terms from a controlled vocabulary. This allows all care team members to be time efficient, and offers the maximum ability to compare data between cases, operators, and other variables.