



**EPIC**<sup>TM</sup>  
RESEARCH  
DIAGNOSTICS

## Risk Management Plan ClearView System

### ORIGINATOR:

Name	Job Title	Signature	Date
Dan Miller	Manufacturing Engineer	<i>Dan Miller</i>	3/22/13

### APPROVALS:

Name	Job Title	Signature	Date
Nancy Rizzo	Founder and CEO	<i>N Rizzo</i>	3/22/13
Lloyd Kurth	Technology Director	<i>Lloyd N. Kurth</i>	3/22/13
Andrea Miller	Quality Assurance Director	<i>Andrea Miller</i>	3/22/13
Don Pegg	Design Engineering Consultant (PADT)		



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Don Pegg	Design Engineering Consultant (PADT)	<i>Don Pegg</i>	3/22/13

## **1.0 Purpose**

The purpose of this document is to document the risk management requirements and activities for the EPIC ClearView™ System.

## **2.0 Scope**

- 2.1. Device - EPIC ClearView is plasma imaging device. A complete product description is maintained in the Design & Development Plan (DDP) ClearView System.
- 2.2. Life Cycle - Life cycle of this device is from 'development through obsolescence'. Risk Analysis will be performed in accordance with the EG-001 and EG-012 during the development process and transfer to manufacturing. Post-production monitoring will be performed and documented in the Risk Management File. Annual audits will be performed and documented on the Risk Management File.
- 2.3. Risk Management File Documents - The Risk Management File will include but is not limited to the following documents:
- DD-005 Risk Management Plan
  - DD-006 EPIC ClearView Risk Analysis Report
  - DD-009 EPIC ClearView System FMEA
  - DD-010 EPIC ClearView Software FMEA
  - Post Production monitoring documents or reference to those documents
  - Annual reviews, including any changes to the Risk Management Documents

## **3.0 Definitions**

The definitions of ISO 14971:2007 apply to the risk management requirements and activities of the EPIC ClearView system.

## **4.0 Responsibilities**

Responsibilities for development and approval of all risk analysis activities will be conducted in accordance to the responsibilities outlined in the Design & Development Plan (DDP) ClearView System.

## **5.0 Criteria for Acceptability of Risk**

- 5.1. Risks will be evaluated in accordance with EG-012 Risk Management procedure which provides methods for assessing Effects of Failure, Severity, Probability of Occurrence, Probability of Detection, and Risk Priority Number (RPN).
- 5.2. Acceptable Risk per RPN for EPIC ClearView is 216 as specified in EG-012.
- 5.3. Any RPNs above this value or any severity or detection ratings above six (6) require additional mitigation to reduce their rating as specified in EG-012.

## **6.0 Requirements for Review of Risk Management Activities**

- 6.1. A Failure Mode and Effects Analysis will be initiated during product design and updated as necessary during the development.
  - Device characteristics that could impact on safety (reference Annex C in ISO 14971) will be identified in the Risk Analysis Report or via other means.
  - The EPIC ClearView FMEA contains product and use hazards.
  - FMEAs will be completed using system, software, and process perspectives. Separate FMEA documents may be created to address individual concerns related to each. Data on the FMEA Table includes:
    - Process/Item Function Process/Function Description
    - Potential Failure Modes (Identification of Hazards)
    - Potential Effect(s) of Failure & Estimation of Risk
    - Potential Causes(s) Mechanism(s) of Failure & Estimation of Risk
    - Current Controls & Estimation of Detection
    - RPN value (Risk Evaluation)
    - Recommended Action(s) if RPN exceeds acceptable limits – including Responsibility & Target Completion Date; Action Taken; Severity, Occurrence & Detection values and revised RPN.

**Note: If RPN still exceeds acceptable limits, further action will be required.**

- 6.2. The Risk Analysis Report or other applicable documents will identify whether or not the RPN numbers meet the values in the Risk Management Plan and EPIC's Risk Management procedure.

## **7.0 Verification Activities**

If applicable, verification and validation testing in EG-001 Design Control Procedure will be cross referenced in the Current Controls and/or the Actions Taken columns of the FMEA table.

## **8.0 Approvals**

- 8.1. Approvals of this plan are outlined in the Design & Development Plan (DDP) ClearView System.
- 8.2. The Risk Analysis Report will be reviewed and approved to ensure completeness and conformance to EG-012 Risk Management procedure and this Risk Management Plan. Approvals are outlined in the Design & Development Plan (DDP) ClearView System.

## **9.0 Location of Risk Management Files**

- 9.1. The Risk Management Files are a part of the product design history file. Design History File management is specified in the Design Control Procedure. Design History Files are kept for the life of the product.
- 9.2. Reviews and updates to the Risk Management Files after product release will be done on an annual basis through the internal audit procedure and project review meetings.
- 9.3. Reviews and updates will be documented and approved and included with the applicable Risk Management File.

## **10.0 Reference Documents**

DD-006	Risk Analysis Report
DD-009	EPIC ClearView System FMEA
DD-010	EPIC ClearView Software FMEA
DD-011	EPIC ClearView Process FMEA
DDP-001	Design & Development Plan (DDP) ClearView System
EG-001	Design Control Procedure
EG-012	Risk Management
ISO 14971:2007 Medical devices – Application of risk management to medical devices	



## Risk Management Plan ClearView System

### 11.0 Attachments

None



## Risk Management Plan ClearView System

### REVISION HISTORY

Revision	Revision Date	Reason for Revision/Change Request	Revised By
000	03Apr12	Initial Release	S. Pletzer
001	22Mar13	Update document to comply with EPIC's Risk Management procedure (EG-012) and current design history documentation.	D. Miller