

# INCOSE SA CONFERENCE 2015

## GREATEST YOUNG SYSTEM ENGINEERS OF THE YEAR -GYSEOY

*PROUD INNOVATORS OF COMPETITIVE MISSILE AND UAV SOLUTIONS*

### **DENEL DYNAMICS TEAM**

ELSABE EBERSOHN

JEFF JOSEPH

YOSHLYN NAIDOO

PURUSHA NAIDOO

# THE CHALLENGE

- Follow a System Engineering approach, using CORE, to develop a specification for a system with the following mission:
  - Early Detection of Colorectal Cancer
- Client Requirements:
  - Preferably Non-invasive
  - Make Economic Sense
  - Feasible
  - Based on Mature Technology



**1 in 3**

adults ages 50-75 are  
still not getting screened  
as recommended

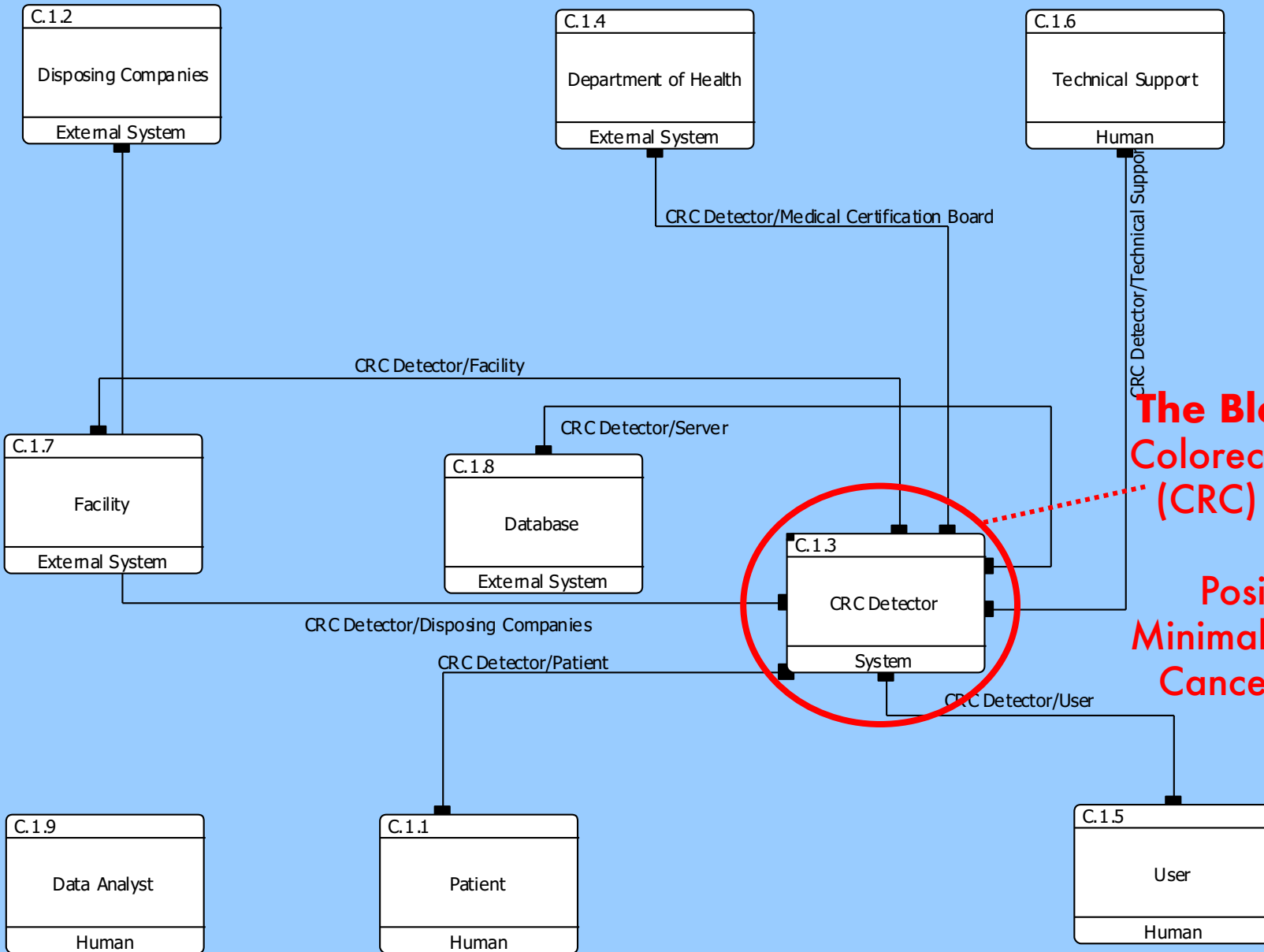


**9** OUT OF **10**

CASES OF COLORECTAL CANCER CAN BE  
TREATED SUCCESSFULLY WHEN FOUND EARLY.

# BLACK BOX APPROACH

ifbd Minimally-invasive Cancer System

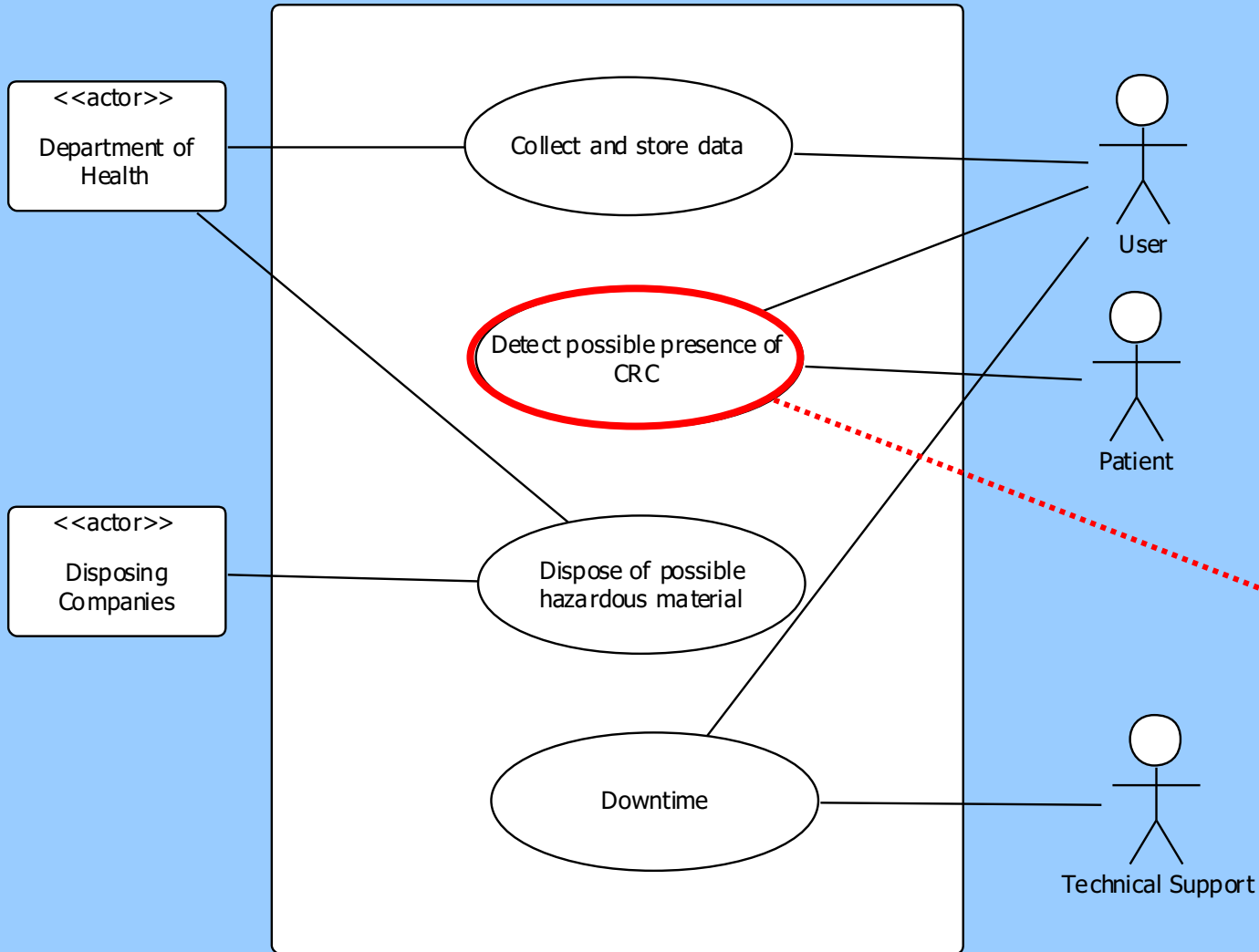


**The Black Box:**  
Colorectal Cancer  
(CRC) Detector

**Position in**  
Minimally-invasive  
Cancer System

# CRC DETECTOR USE CASE DIAGRAM

uc CRC Detector Use Case



**Main Mission:  
Early Detection  
of Colorectal  
Cancer**

# CRC DETECTOR STATES

