Redesigning the Hub Cap to Decrease Central Line Associated Blood Stream Infections

Tech ID: 26026 / UC Case 2016-049-0

INVENTION NOVELTY

This is a novel mechanism for preventing infections in catheter hubs used in central lines.

VALUE PROPOSITION

This novel invention protects the catheter hub from exposure to the outside environment in order to prevent dangerous central line associated blood stream infections (CLABSI). Prevention of CLABSI can reduce patient hospital stays by weeks and result in large cost savings.

20-30% of CLABSI are caused by contaminated catheter hubs. CLABSI cost $0.7 to $2.7 billion dollars annually in the United States, and increase the length of patient hospital stays by 7 to 21 days. Additionally, Medicare penalizes hospitals for vascular catheter related infections, so hospitals must bear the entire cost of treatment.

Catheter hubs may be exposed to potential contaminants in the outside environment. Current protocols require nursing intervention to apply alcohol swabs to the hub. This invention provides a novel mechanical solution for preventing hub infection without health care worker intervention.

TECHNOLOGY DESCRIPTION

The invention consists of a mechanical mechanism specifically engineered to prevent infection through the catheter.

LOOKING FOR PARTNERS

To develop & commercialize the technology as a connector for intravenous tubing in central lines, as well as other intravenous tubing connectors in other areas of medicine.

STAGE OF DEVELOPMENT

This device is currently being developed as a prototype.

RELATED MATERIALS

DATA AVAILABILITY

Data is available under NDA.

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OTHER INFORMATION

KEYWORDS

Catheter, Central line, Central line associated blood stream infections (CLABSI), Blood stream infections

CATEGORIZED AS

- **Medical**
  - Devices

RELATED CASES

2016-049-0

PATENT STATUS

Country	Type	Number	Dated	Case
Patent Cooperation Treaty	Reference for National Filings	WO 2017/048955	03/23/2017	2016-049

Patent Pending

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