



Background/Aim

Transrectal ultrasound is an investigation that involves insertion of a probe through the anus to assess the rectum.

Diagram 1 shows patient in lateral position with procedure gown lifted up to expose lower half of body during the process. Blanket is used to minimize unnecessary exposure. Patients generally feel a sense of embarrassment as they remain conscious throughout with inadequate coverage of the private area. **Privi-pants** is designed with the intent to preserve patient's modesty during the procedure.



Diagram 1: **As-Is**
Patient with exposed lower half of body

Methodology

Learn from everyone

The team came across a pair of disposable pants with a hole (diagram 2) during a study trip. A search was conducted on return but to no avail as it is not used locally. We reckoned that this disposable pants was able to preserve modesty during procedure to some extent but the standard opening may inevitably result in unnecessary exposure for some patients, and limits mobility due to inadequate coverage from movement during ambulation.



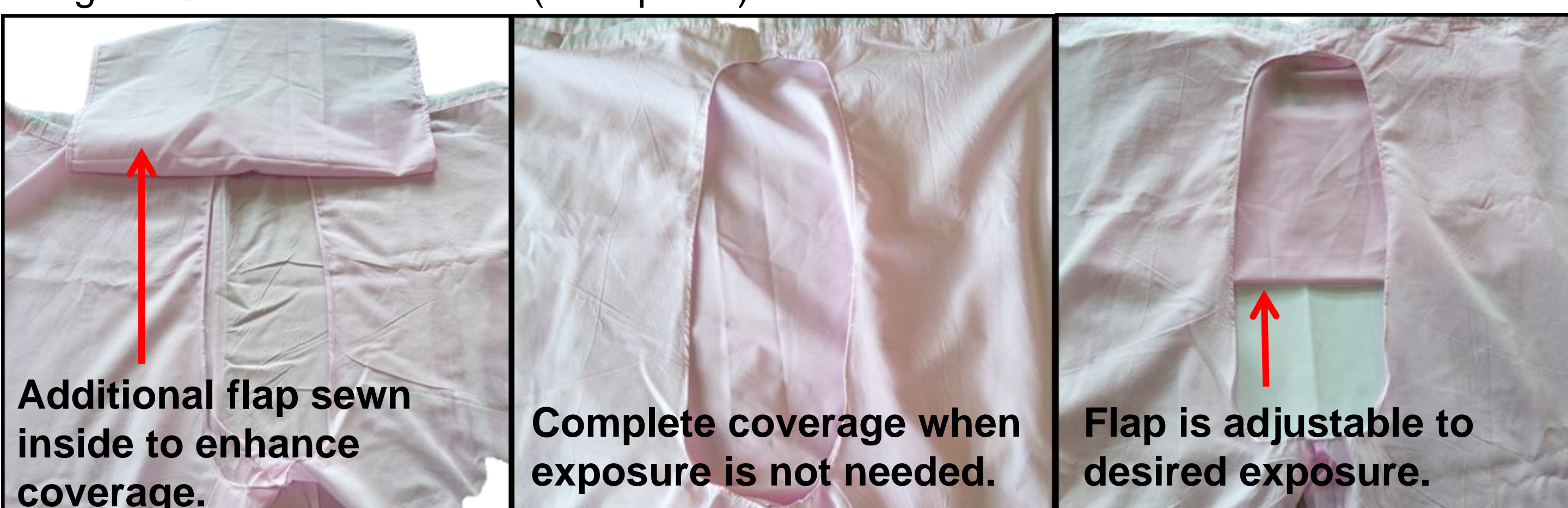
Diagram 2:
Sample of disposable pants (obtained overseas) with standard exposure

Start Small, Act Fast

The Linen Department was rapidly engaged to prototype modified versions from existing pants used for inpatients (diagrams 3 and 4), to suit the needs of our patients. Privi-pants is designed with a hole at the back along with the addition of an easily adjustable flap to allow:

- Better control over extent of exposure required during procedure,
- Complete coverage when exposure is not required, and
- Free movement without having to worry about accidental exposure.

Diagram 3: Modified version (Privi-pants) – Pink for female and blue for male



Internal view of pants

External view of pants



Diagram 4: **To-Be**
Privi-pants in use during procedure

Results

Four questions and avenue for feedback were obtained from 15 patients (47% female and 53% male) who had tried 'Privi-pants'.

A physical sample was shown to minority who have not tried the procedure gown. Results as shown below:

Question	Privi-pants	Procedure Gown
Which do you feel provides more privacy?	100%	0%
Which do you feel provides more comfort?	100%	0%
Which do you think is more convenient?	100%	0%
Given a choice of both attire that do not affect the process and outcome of procedure, which do you prefer?	100%	0%

Quote from one of the patients:

"This is definitely **much better** than the gown I wore during colonoscopy in another hospital which is similar to your procedure gown. I **do not even need to remove the pants** for this! Although I saw a hole when I was changing, but I **didn't feel "naked"** while wearing, in fact I have totally forgotten there was a hole behind. Feels **less exposed. This is good**".

Project Impact

📍**Patient:** With the preservation of privacy and dignity, the patient's experience is much improved during a procedure that can be uncomfortable and embarrassing.

📍**Staff:** Elimination of distraction from tying procedure gown for patients during logistic and administrative preparations.

📍**Organization:** Yishun Health Campus is the **ONLY** organization in Singapore with Privi-pants at time of implementation. The focus of the initiative is to improve patient's experience. The made-in-Singapore version, which is re-usable, has incidentally achieved a cost saving in laundry as shown in table below:

	Blanket	Procedure Gown	Privi-pants	Total
As Is	\$1.50	\$0.60	-	\$2.10
To Be	-	-	\$0.75	\$0.75
Total cost savings on laundry per patient				\$1.35

Conclusion

The use of Privi-pants allows provision of uncompromised care (**just as safe**) that promotes cost savings (**cheaper**) for organization and **better** experience for patients.

Sustainability & Follow up

The innovation of the Privi-pants is a sustainable, low cost alternative used in the General Surgery Clinic (Colorectal Service) for patients undergoing transrectal ultrasound. Ongoing collaborative work is in progress with Endoscopy centre to spread the use of privi-pants for patients undergoing colonoscopy. From infection control perspective in the Endoscopy setting, spillage and faecal contamination is anticipated. Hence, with the continuous effort from the hospital's Material Management Department in sourcing for disposable version, vendors were eventually found. KTPH Endoscopy Centre will be initiating trial on the use of disposable Privi-pants to heighten the privacy and comfort of patients during colonoscopy.