

Sr. no.	QI Week	PDSA (Idea)	STUDY		ACT
		(Idea with Duration)	Merits	Limitations	Outcome (Discussed in weekly Team Meeting)
1	1 st	Baseline			Plan to try broader strips of Micropore™ on the butterfly flap
2	2 nd	Broader strips of Micropore™ on the butterfly flap (4 days)	Better fixation than narrower strips	Hub and wings did not get immobilised together	Idea of broader strips of Micropore™ on the butterfly flap - ABANDONED Plan to try Fixomull™ to strap the limb with the splint/limb
3	2 nd	Strips of Fixomull™ to strap the limb with the splint/limb (3 days)	Better fixation, lesser skin peeling at the time of removal	Hub and wings did not get immobilised together	Idea of using Fixomull™ to strap the limb with the splint/limb – ABANDONED Plan to try Tegaderm™ flaps on wings and hub
4	3 rd	Tegaderm™ (sterile transparent dressing) flaps on wings and hub (3 days)	Completely transparent seal, easier to monitor cannula complications Better anchoring of cannula	Difficult to apply - material folds on itself - lot of wastage of material	Tegaderm™ flaps on wings and hub proved difficult to be applied, material wastage was a concern – idea ADAPTED Fixomull™ was a better choice to be used in overlapping flaps to anchor the cannula wings.
5	3 rd 4 th , 5 th , 6 th	Fixomull™ flaps on wings and hub (Tried for 1 week, successful, continued till the end)	Better anchoring of cannula, best by far		Fixomull™ flaps were a success – idea ADOPTED – continued for the remaining weeks Fixomull™ flaps continued for the remaining weeks Plan to add a compulsory 10cm, 3-way extension with the cannula and fixation of the same with the splint/limb End of 5 th week
6	5 th , 6 th	Compulsory use of a 10cm 3-way extension with the cannula and fixation of the same with the splint/limb (Tried for 1 week, successful, continued till the end)	No movement at the point of insertion due to movement of the infusion lines		Fixomull™ flaps continued for the remaining weeks Idea of adding a compulsory 10cm, 3-way extension with the cannula and fixation of the same with the splint/limb – ADOPTED Plan to try fixation without splints
7	6 th	Fixation without a splint (Tried for 1 week - Unsuccessful Discontinued after 1 week)	More comfortable for the baby, reduction of weight on the limb	More movement of the limb allowed causing more frequent dislodgement of cannula Loss of area on which the 10cm 3-way extension could be anchored	Splints did not significantly change the cannula-longevity but having a splint gave additional surface area to anchor the 10cm, 3-way extension line and prevented unnecessary application of adhesive tapes to the neonate's delicate skin. Hence omission of splints – ABANDONED