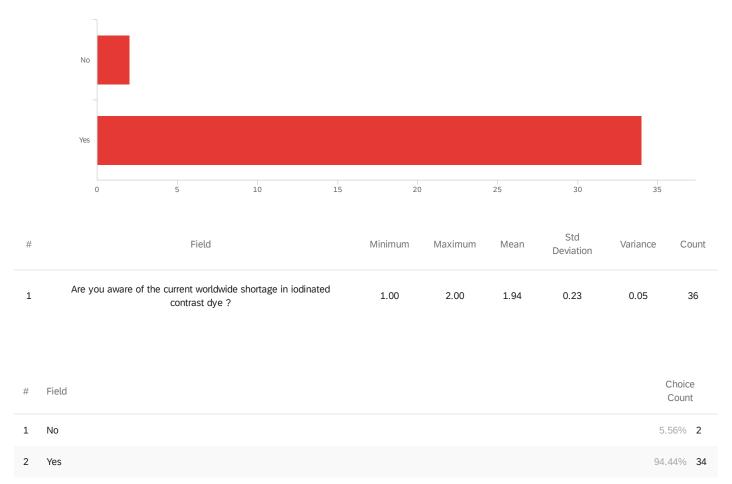
Default Report

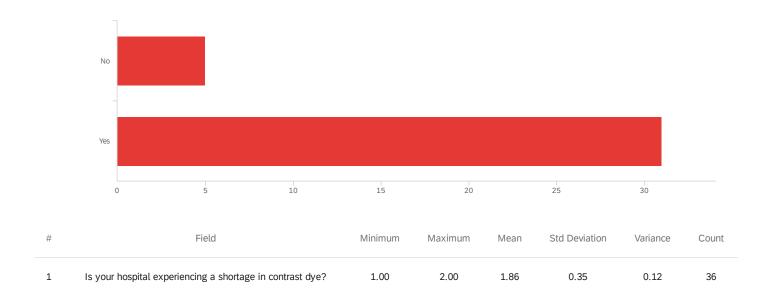
Contrast Shortage Survey July 23, 2022 3:34 PM MDT

Q4 - Are you aware of the current worldwide shortage in iodinated contrast dye?



36

Q5 - Is your hospital experiencing a shortage in contrast dye?



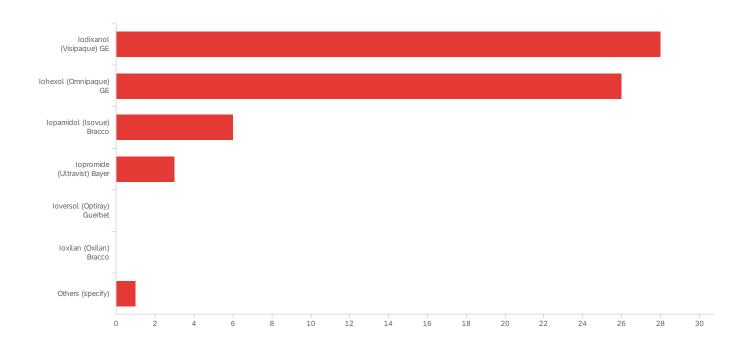
#	Field	Choice Count
1	No	13.89% 5
2	Yes	86.11% 31

36

Showing rows 1 - 3 of 3

Q6 - Which contrast agents do you use in the catheterization laboratory? (select all that

apply)



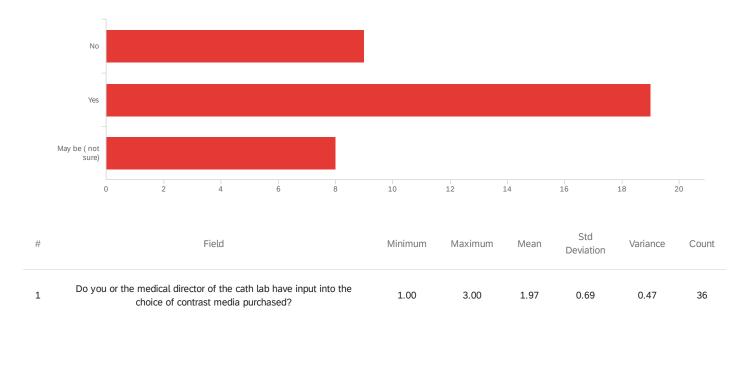
Data source misconfigured for this visualization.

#	Field	Choice Count
1	Iodixanol (Visipaque) GE	43.75% 28
2	Iohexol (Omnipaque) GE	40.63% 26
3	Iopamidol (Isovue) Bracco	9.38% 6
4	Iopromide (Ultravist) Bayer	4.69% 3
5	Ioversol (Optiray) Guerbet	0.00% 0
6	Ioxilan (Oxilan) Bracco	0.00% 0
7	Others (specify)	1.56% 1
		64

Iobitridol (Guerbet)

Q7 - Do you or the medical director of the cath lab have input into the choice of contrast

media purchased?

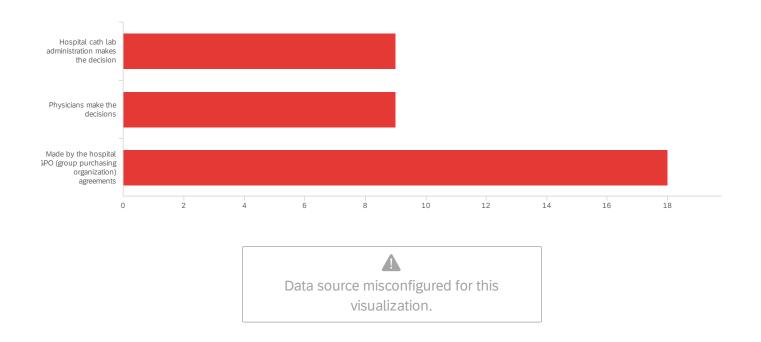


#	Field	Choice Count	
1	No	25.00%	9
2	Yes	52.78%	19
3	May be (not sure)	22.22%	8
		:	36

Showing rows 1 - 4 of 4

Q8 - How is the decision made to purchase specific types of contrast agents? (select all

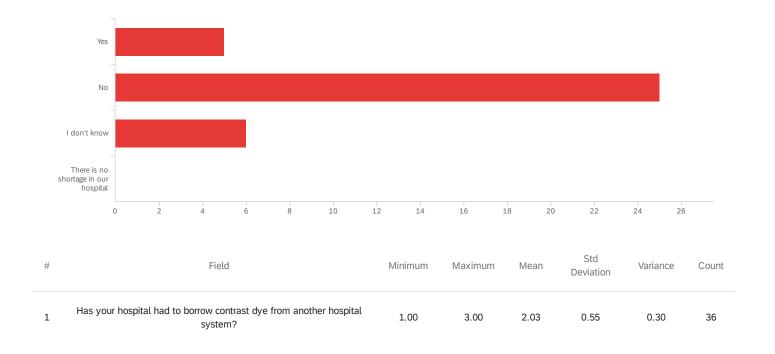
that apply)



1 Hospital cath lab administration makes the decision 25.00%	
	9
2 Physicians make the decisions 25.00%	9
3 Made by the hospital GPO (group purchasing organization) agreements 50.00%	18
	36

Showing rows 1 - 4 of 4 $\,$

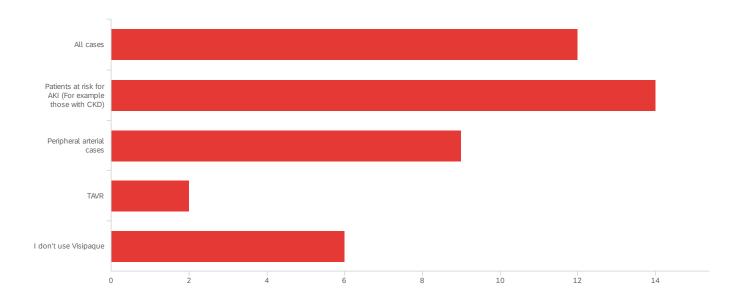
Q9 - Has your hospital had to borrow contrast dye from another hospital system?



#	Field	Choice Count	
1	Yes	13.89% 5	
2	No	69.44% 25	
3	I don't know	16.67% 6	
4	There is no shortage in our hospital	0.00% 0	

Q10 - For what types of cases do you use Iodixanol (Visipaque) GE in your cath lab?

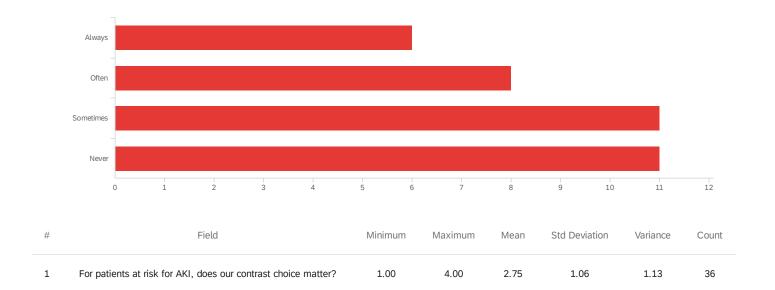
(select all that apply)



#	Field	Choice	
1	All cases	27.91%	12
2	Patients at risk for AKI (For example those with CKD)	32.56%	14
3	Peripheral arterial cases	20.93%	9
4	TAVR	4.65%	2
5	I don't use Visipaque	13.95%	6
			43

Showing rows 1 - 6 of 6

Q11 - For patients at risk for AKI, does our contrast choice matter?



#	Field	Choice Count
1	Always	16.67% 6
2	Often	22.22% 8
3	Sometimes	30.56% 11
4	Never	30.56% 11

36

Showing rows 1 - 5 of 5 $\,$

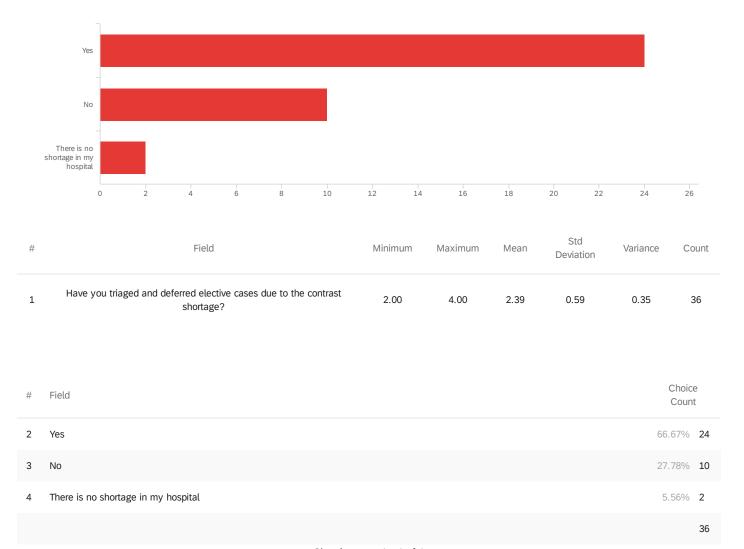
Q12 - Approximately how much contrast dye does your hospital have on hand currently

for the cath lab?



Showing rows 1 - 6 of 6

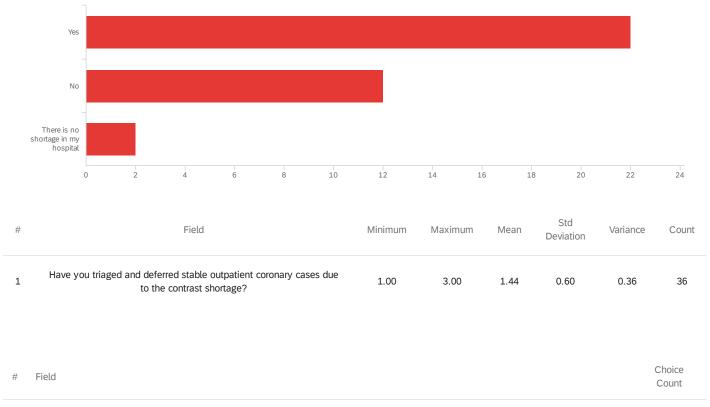
Q13 - Have you triaged and deferred elective cases due to the contrast shortage?



Showing rows 1 - 4 of 4

Q14 - Have you triaged and deferred stable outpatient coronary cases due to the

contrast shortage?



 1
 Yes
 61.11%
 22

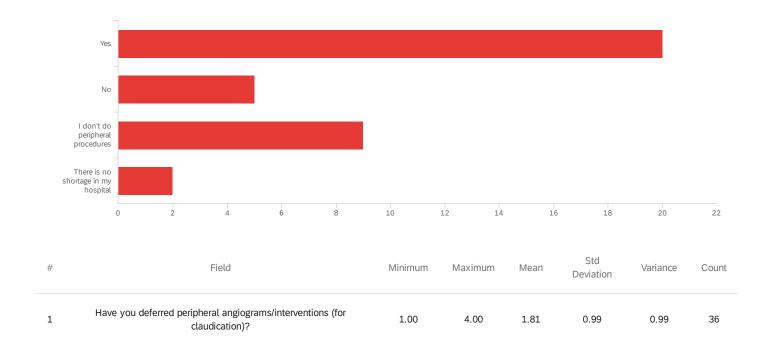
 2
 No
 33.33%
 12

 3
 There is no shortage in my hospital
 5.56%
 2

 3
 36

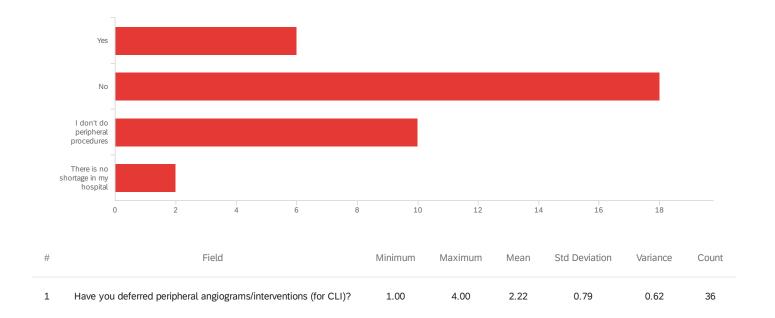
Showing rows 1 - 4 of 4

Q15 - Have you deferred peripheral angiograms/interventions (for claudication)?



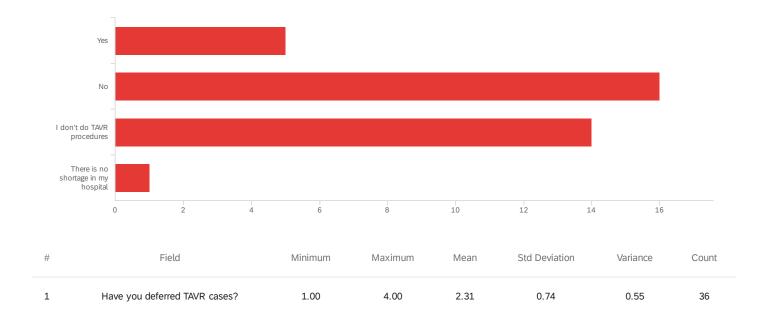
#	Field	Choice	
1	Yes	55.56%	20
2	No	13.89%	5
3	I don't do peripheral procedures	25.00%	9
4	There is no shortage in my hospital	5.56%	2

Q16 - Have you deferred peripheral angiograms/interventions (for CLI)?



#	Field	Choice	
1	Yes	16.67%	6
2	No	50.00%	18
3	I don't do peripheral procedures	27.78%	10
4	There is no shortage in my hospital	5.56%	2

Q17 - Have you deferred TAVR cases?



#	Field	Choice Count	
1	Yes	13.89%	5
2	No	44.44%	16
3	I don't do TAVR procedures	38.89%	14
4	There is no shortage in my hospital	2.78%	1

Q18#1 - For outpatients, what is your approach to deferring/rescheduling due to the contrast shortage? - Select most widely used strategy

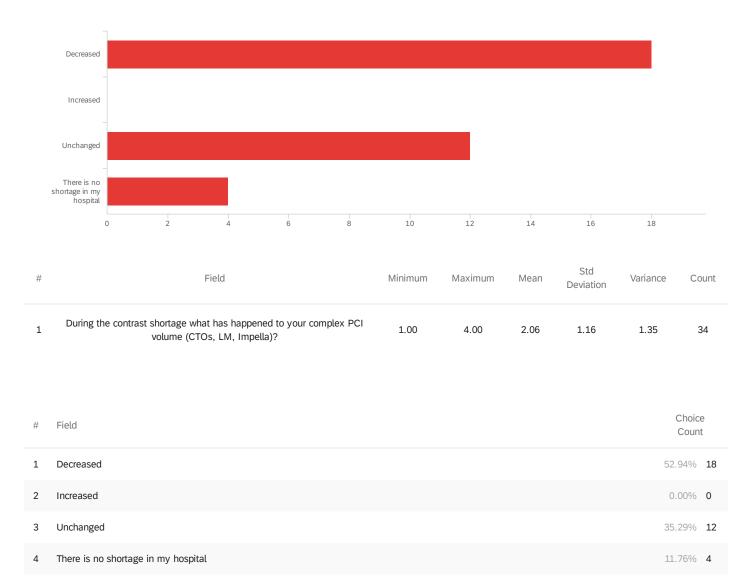
#	Field	Must be done	Can be delayed up to 4 weeks	Can be delayed > 4 weeks	Total
1	Class I/II angina	9.09% 2	31.82% 7	59.09% 13	22
2	Class III/IV angina	61.90% 13	23.81% 5	14.29% 3	21
3	Newly diagnosed systolic heart failure	38.10% 8	23.81% 5	38.10% 8	21
4	Ischemia on non-invasive testing or abnormal coronary CT angiogram with otherwise stable symptoms	19.05% 4	38.10% 8	42.86% 9	21
5	Pre-solid organ transplant (liver)	25.00% 5	30.00% 6	45.00% 9	20
6	Pre-solid organ transplant (kidney)	20.00% 4	30.00% 6	50.00% 10	20
7	Pre-solid organ transplant (lung)	25.00% 5	30.00% 6	45.00% 9	20
8	Pre-non cardiac surgery (other than transplant)	5.00% 1	45.00% 9	50.00% 10	20
	Showing rov	vs 1 - 8 of 8			
#	Field	Minimum	Maximum Mean	Std Variance Deviation	Count
1	Class I/II angina	1.00	3.00 2.50	0.66 0.43	22
2	Class III/IV angina	1.00	3.00 1.52	0.73 0.54	21
3	Newly diagnosed systolic heart failure	1.00	3.00 2.00	0.87 0.76	21
4	Ischemia on non-invasive testing or abnormal coronary CT angiogram with otherwise stable symptoms	1.00	3.00 2.24	0.75 0.56	21
5	Pre-solid organ transplant (liver)	1.00	3.00 2.20	0.81 0.66	20
6	Pre-solid organ transplant (kidney)	1.00	3.00 2.30	0.78 0.61	20
7	Pre-solid organ transplant (lung)	1.00	3.00 2.20	0.81 0.66	20
8	Pre-non cardiac surgery (other than transplant)	1.00	3.00 2.45	0.59 0.35	20
#	Field	Must be done	Can be delayed up to 4 weeks	Can be delayed > 4 weeks	Total
1	Class I/II angina	9.09% 2	31.82% 7	59.09% 13	22

#	Field	Must be done	Can be delayed up to 4 weeks	Can be delayed > 4 weeks	Total
2	Class III/IV angina	61.90% 13	23.81% 5	14.29% 3	21
3	Newly diagnosed systolic heart failure	38.10% 8	23.81% 5	38.10% 8	21
4	Ischemia on non-invasive testing or abnormal coronary CT angiogram with otherwise stable symptoms	19.05% 4	38.10% 8	42.86% 9	21
5	Pre-solid organ transplant (liver)	25.00% 5	30.00% 6	45.00% 9	20
6	Pre-solid organ transplant (kidney)	20.00% 4	30.00% 6	50.00% 10	20
7	Pre-solid organ transplant (lung)	25.00% 5	30.00% 6	45.00% 9	20
8	Pre-non cardiac surgery (other than transplant)	5.00% 1	45.00% 9	50.00% 10	20

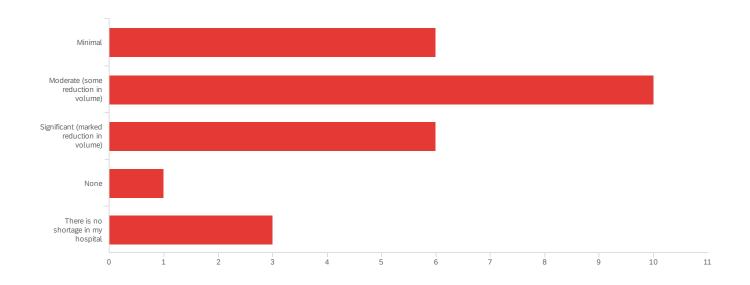
Showing rows 1 - 8 of 8

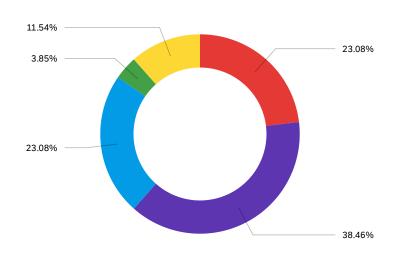
Q19 - During the contrast shortage what has happened to your complex PCI volume

(CTOs, LM, Impella)?



Q20 - The impact on fellow education of the contrast shortage has been:





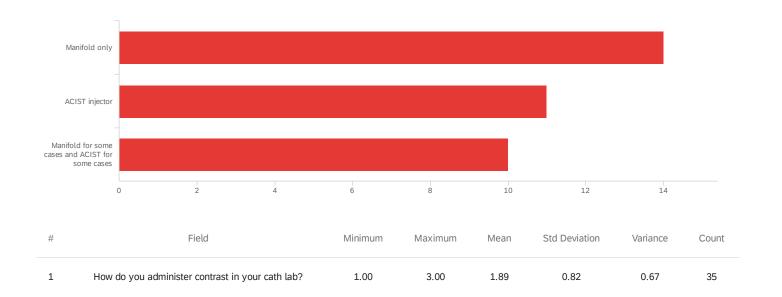
	Minimal Mod	lerate (some reduction in volume)	Significant (marked reduction in volume)	None	There is no shortage in my hospital		
#	Field					Choice Count	
1	Minimal					23.08% 6	ŝ
2	Moderate (some red	uction in volume)				38.46% 1	10
3	Significant (marked i	reduction in volume)				23.08% 6	ô
4	None					3.85% 1	1
5	There is no shortage	in my hospital				11.54% 3	3

Field Choice Count

Showing rows 1 - 6 of 6

26

Q21 - How do you administer contrast in your cath lab?

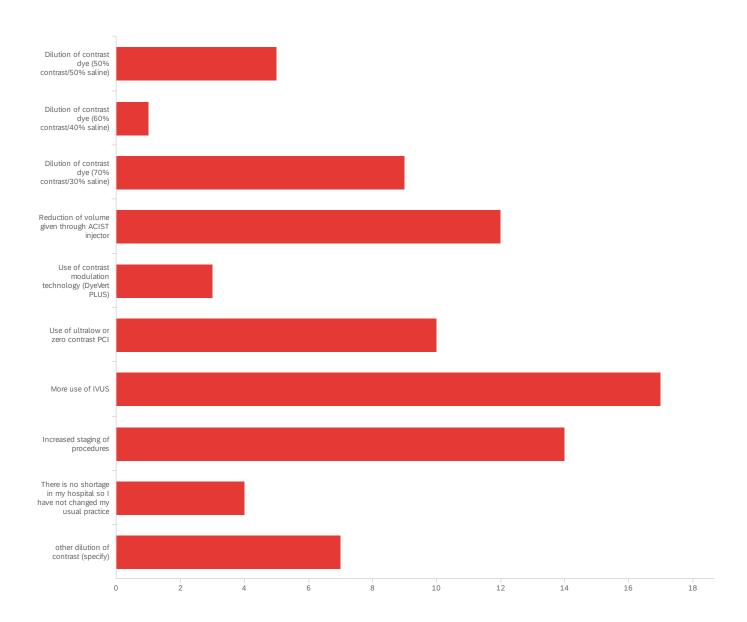


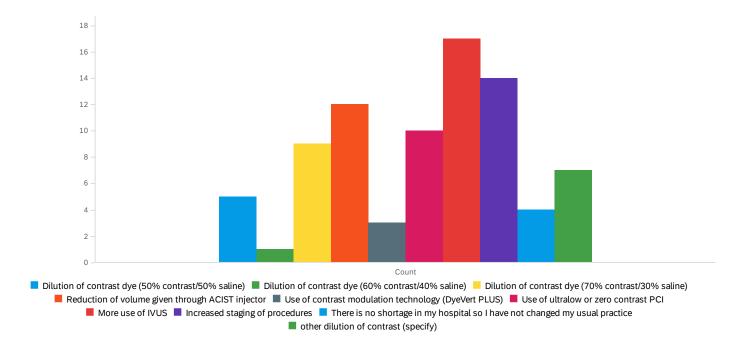
#	Field		Choice Count	
1	Manifold only	40.00%	14	
2	ACIST injector	31.43%	11	
3	Manifold for some cases and ACIST for some cases	28.57%	10	
			35	

Showing rows 1 - 4 of 4 $\,$

Q22 - For CORONARY cases which of the following procedural techniques have you

used to reduce contrast use during the shortage? (select all that apply)





Q21_11_TEXT - other dilution of contrast (specify)

other dilution of contrast (specify)

Bunching cases on certain days to be most efficient for Acist use

Breaking up 150cc bottles to 50cc syringes

CO2 FOR PERIPHERSL

We have not diluted the contrast. just cautious on the amount of dye used.

Splitting contrast into smaller bottles so less residual waste

no ventriculograms

Decrease waste by getting rid of tubing which requires priming; instead we fill up a 30CC and hook it up directly to manifold



Field Choice Count

Showing rows 1 - 11 of 11

82

Q23 - For PERIPHERAL cases which of the following procedural techniques have you used to reduce contrast use during the shortage? (select all that apply)



Dil	ution of contrast dye (50% contrast/50% saline) Dilution of contrast dye (60% contrast/40% saline) Dilution of contrast dye (70% contrast	/30% saline)
	Reduction of volume given through ACIST injector Use of contrast modulation technology (DyeVert PLUS) More use of IVUS	
	Increased staging of procedures Use of CO2 imaging Use of more selective catheter injections	
ı	There is no shortage in my hospital so I have not changed my usual practice I don't do peripheral procedures other dilution of contrast (s	pecify)
#	Field	Choice Count
1	Dilution of contrast dye (50% contrast/50% saline)	9.09% 6
2	Dilution of contrast dye (60% contrast/40% saline)	9.09% 6
3	Dilution of contrast dye (70% contrast/30% saline)	4.55% 3
5	Reduction of volume given through ACIST injector	7.58% 5
6	Use of contrast modulation technology (DyeVert PLUS)	1.52% 1
7	More use of IVUS	7.58% 5
8	Increased staging of procedures	12.12% 8
9	Use of CO2 imaging	13.64% 9
10	Use of more selective catheter injections	9.09% 6
11	There is no shortage in my hospital so I have not changed my usual practice	4.55% 3

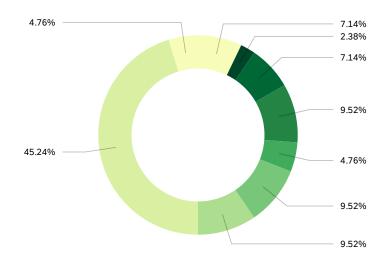
#	Field	Choice Count
12	I don't do peripheral procedures	21.21% 14
13	other dilution of contrast (specify)	0.00% 0
		66

Showing rows 1 - 13 of 13

Q22_13_TEXT - other dilution of contrast (specify)

other dilution of contrast (specify)

Q24 - For TAVR cases which of the following procedural techniques have you used to reduce contrast use during the shortage? (select all that apply)



Dil	Dilution of contrast dye (50% contrast/50% saline) Dilution of contrast dye (60% contrast/40% saline) Dilution of contrast dye (70% contrast/30% saline)		
	ment		
U	Jse of non contrast CT scans for valve planning There is no shortage in my hospital so I have not changed my usual practice I don	t do TAVR procedures	
	other dilution of contrast (specify)		
#	Field	Choice Count	
1	Dilution of contrast dye (50% contrast/50% saline)	7.14% 3	
2	Dilution of contrast dye (60% contrast/40% saline)	2.38% 1	
3	Dilution of contrast dye (70% contrast/30% saline)	7.14% 3	
5	Reduction of volume given through ACIST injector	9.52% 4	
6	Use of catheters to mark the non-coronary cusp/landmark for deployment	4.76% 2	
7	Use of non contrast CT scans for valve planning	9.52% 4	
9	There is no shortage in my hospital so I have not changed my usual practice	9.52% 4	
10	I don't do TAVR procedures	45.24% 19	
11	other dilution of contrast (specify)	4.76% 2	
		42	

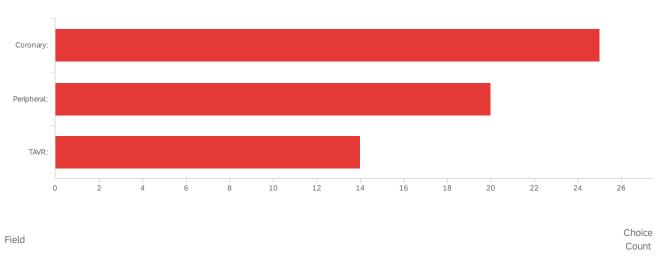
Q23_11_TEXT - other dilution of contrast (specify)

other dilution of contrast (specify)

No change

no change to TAVR

Q25 - What is the optimal contrast dilution (contrast%/saline%) for the following applications when trying to saving contrast:





Showing rows 1 - 4 of 4

Q24_1_TEXT - Coronary:

Coronary:	
70/20	
70%	
Don't know	
80	
70/30	
100% contrasr	
no dilution	
Na	

	Coronary:
	70%/30%
	100/0
	50
	50/50
	50/50
	80/20
	80-20
	0
	70/30
	50/50
	25%
	90/10
	80/20
	70/30
	70/30
	20-20
C	Q24_2_TEXT - Peripheral:
	Peripheral:
	50/50
	50%
	Don't know
	70

	Peripheral:
	Na
	50
	30%/70%
	50/50
	70
	50/50
	50/50
	70-30
	0
	50/50
	60/40
	40/60
	50/50
	50/50
	10-10
C	Q24_3_TEXT - TAVR:
	TAVR:
	80/20
	60%
	Don't know
	50/50
	Don't do
	Na

/R:	
%/20%	
750	
30	
750	
730	
20	

Q26 - My cath lab uses a contrast miser or similar device to allow a bottle of contrast to

be used on multiple patients when using a manifold



Showing rows 1 - 4 of 4

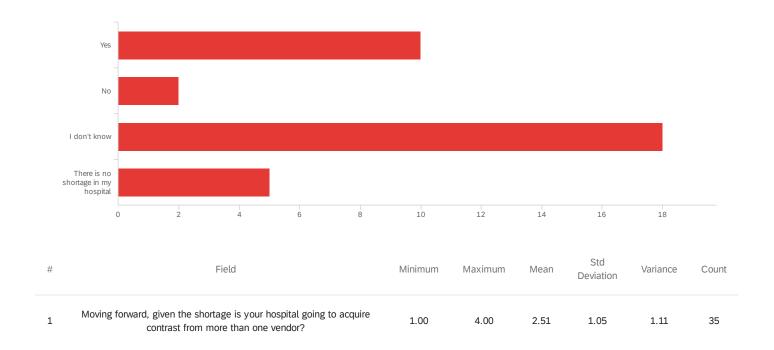
Q27 - My cath lab can use the bottle of contrast and the left-over contrast in the injection syringe in an ACIST injector for multiple patients



Showing rows 1 - 4 of 4

Q28 - Moving forward, given the shortage is your hospital going to acquire contrast from

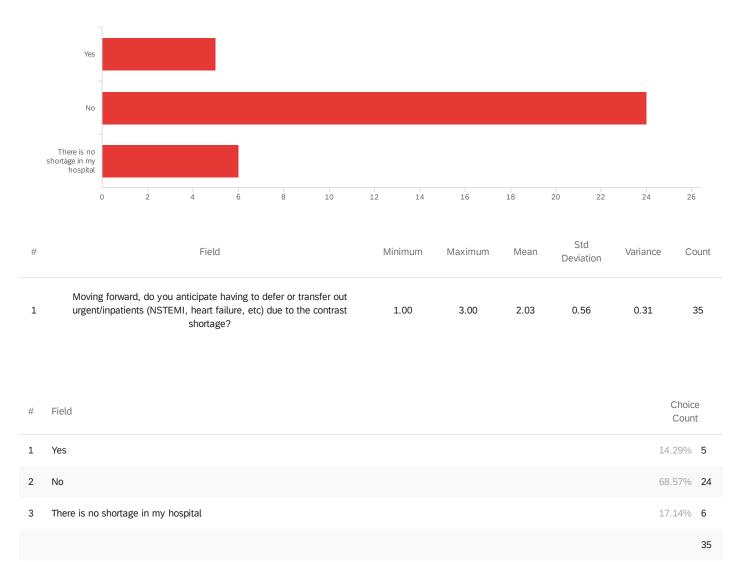
more than one vendor?



#	Field		Choice Count	
1	Yes	28.57%	10	
2	No	5.71%	2	
3	I don't know	51.43%	18	
4	There is no shortage in my hospital	14.29%	5	

Q29 - Moving forward, do you anticipate having to defer or transfer out urgent/inpatients

(NSTEMI, heart failure, etc) due to the contrast shortage?



Showing rows 1 - 4 of 4

Q30 - Moving forward, given the shortage is your hospital going to increase their total

stock of contrast?



Showing rows 1 - 5 of 5

End of Report