

MCDAs in Health System Management

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BACKGROUND

Multi-Criteria Decision Analysis (MCDA) is a holistic, preference-based method that objectively measures competing projects on the same scale. This tool was developed in partnership with the Royal Brisbane and Women's Hospital to meet administrative needs for a value-driven decision method.



SCORING METHODS

ROI = 10(Profit/Cost)

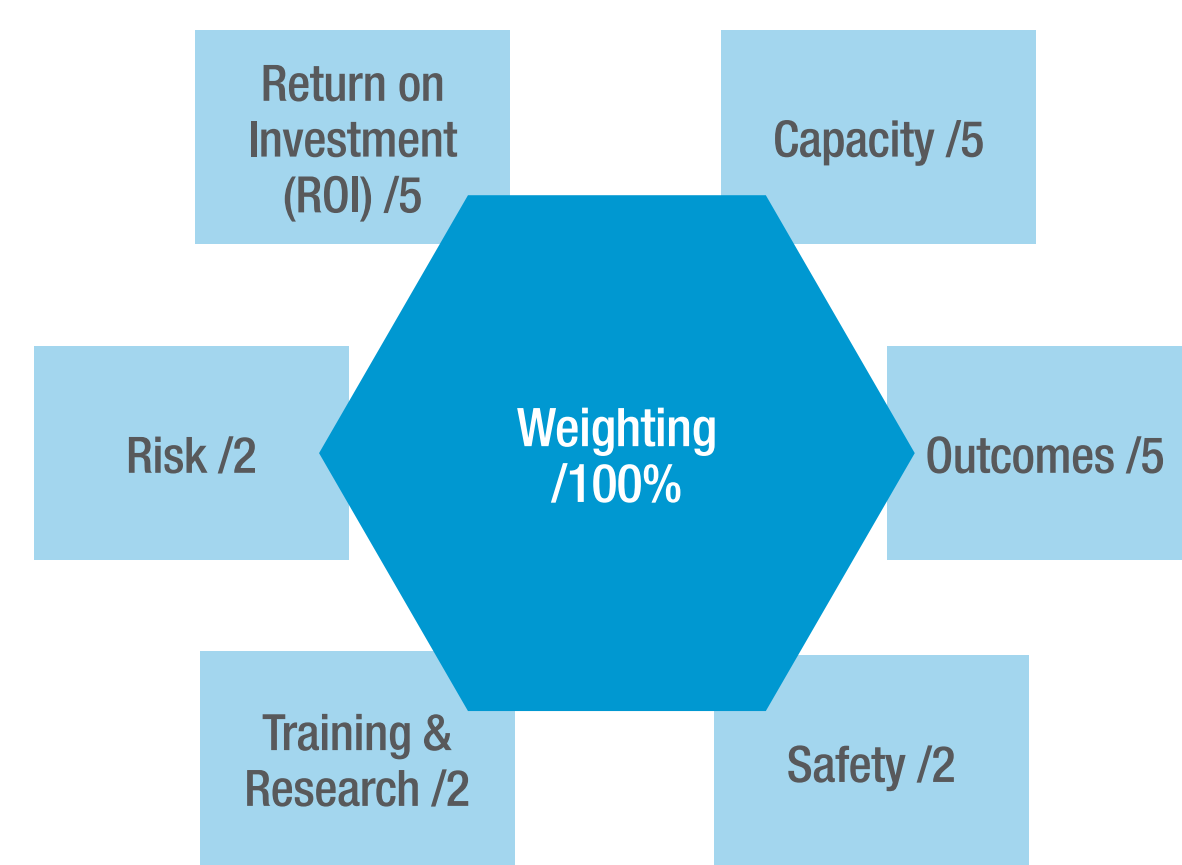
Capacity = (Δ LOS * ppw) + (Added bed days/LOS)

Outcomes = Quality of Life + Satisfaction + Access

Safety = Australian Commission HACs

Training and Research = CPD hours

Risk = Using an accepted risk stratification tool



Project	ROI	Capacity	Outcomes	Safety	Training	Risk	Net Cost	Score	Cost per Point
1 Chemo Funding	1.07	0.00	0.70	0.00	0.05	0.80	-\$7,190,877	2.62	-\$2,749,806
2 APHS	0.07	0.00	0.70	0.00	0.00	0.80	-\$982,496	1.57	-\$625,832
3 ES Pod	0.33	0.15	1.05	0.00	0.10	0.60	-\$1,155,429	2.24	-\$516,091
4 FIM	1.22	0.00	0.70	0.00	0.05	0.80	-\$1,290,202	2.77	-\$465,923
5 CN/CF	0.01	0.00	0.70	0.00	0.10	0.80	\$0	1.61	\$0
6 SW	0.00	5.22	0.70	0.30	0.00	0.80	\$1,103,631	7.02	\$157,212
7 Trach Mgmt Team	0.00	5.36	1.05	0.15	0.05	0.80	\$1,375,846	7.41	\$185,796
8 OPAT	0.00	0.02	1.05	0.00	0.05	0.80	\$501,616	1.92	\$261,859
9 EPICentre	0.00	1.30	1.40	0.30	0.10	0.60	\$5,283,150	3.70	\$1,429,714
10 VASE	0.00	0.00	0.70	0.15	0.05	0.20	\$1,815,965	1.10	\$1,650,877
11 Eat Walk Engage	0.00	0.00	1.40	0.30	0.05	0.80	\$5,055,734	2.55	\$1,982,641
12 CEP-CARU	0.00	0.00	1.05	0.00	0.10	0.00	\$10,476,370	1.15	\$9,109,887

IMPLEMENTATION

Initial adoption findings:

- Reduced paperwork
- Consistent measures
- Value-driven

Limitations:

- Political drivers
- Yet another tool
- Can be manipulated

