3 Major Flaws of natural justice with MSAC reviews of HBO treatment for Non-diabetic problem wounds

(1) MSAC has recommended withdrawal of public funding from funded treatment but provided no evidence that alternative treatments (which continue to be funded), are effective. MSAC has no independent appeals process or scrutiny by another body when it has recommended withdrawal of public funding.

(2) As a result of their 1054 (2004) report, *MSAC requested that the profession develop guidelines and collect data regarding the outcomes of patients with non diabetic problem wounds treated with HBOT*. This request led to setting up the ANZHMG wound study – a nation-wide study of patients receiving HBOT AFTER 3 months failed usual wound care, then followed up to 12 months. The data from this study was submitted to the 1054.1 review, and involves over 400 patients in a seven year period, with ethics approvals in all states.

MSAC then rejected the data that they had requested the profession to collect – essentially wasting everyone's time

(3) MSAC costed HBOT as a first line treatment compared head to head with standard care. This resulted in flawed cost analysis, and a flawed conclusion that HBOT is more expensive than standard care.

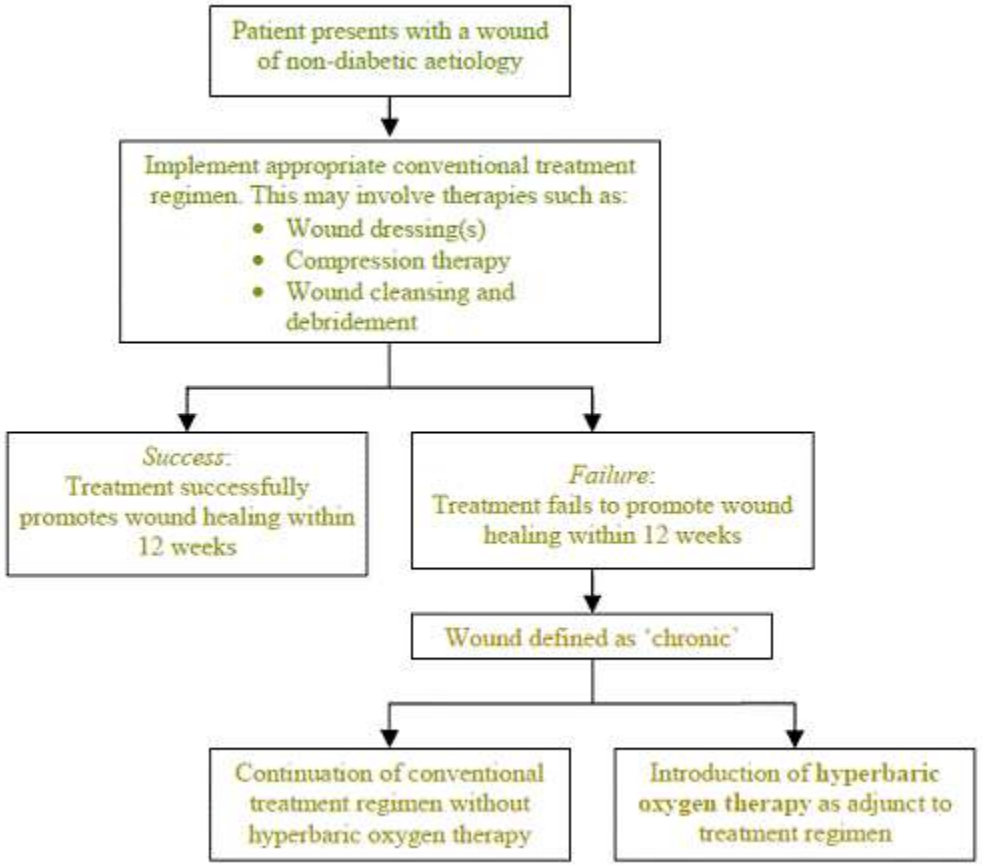
The critique of this analysis is presented below, and costings have been supplied using the correct pathway that shows HBOT is cheaper that standard care – when used as a second-line intervention.

CLINICAL COSTING DATA OF HBOT FOR NON DIABETIC PROBLEM WOUNDS USING APPROPRIATE PATHWAYS.

The clinical pathway presented by MSAC in the 1054.1 report is correct – on the surface it appears the analysis will compare HBOT as an intervention only after 3 months of usual wound care:

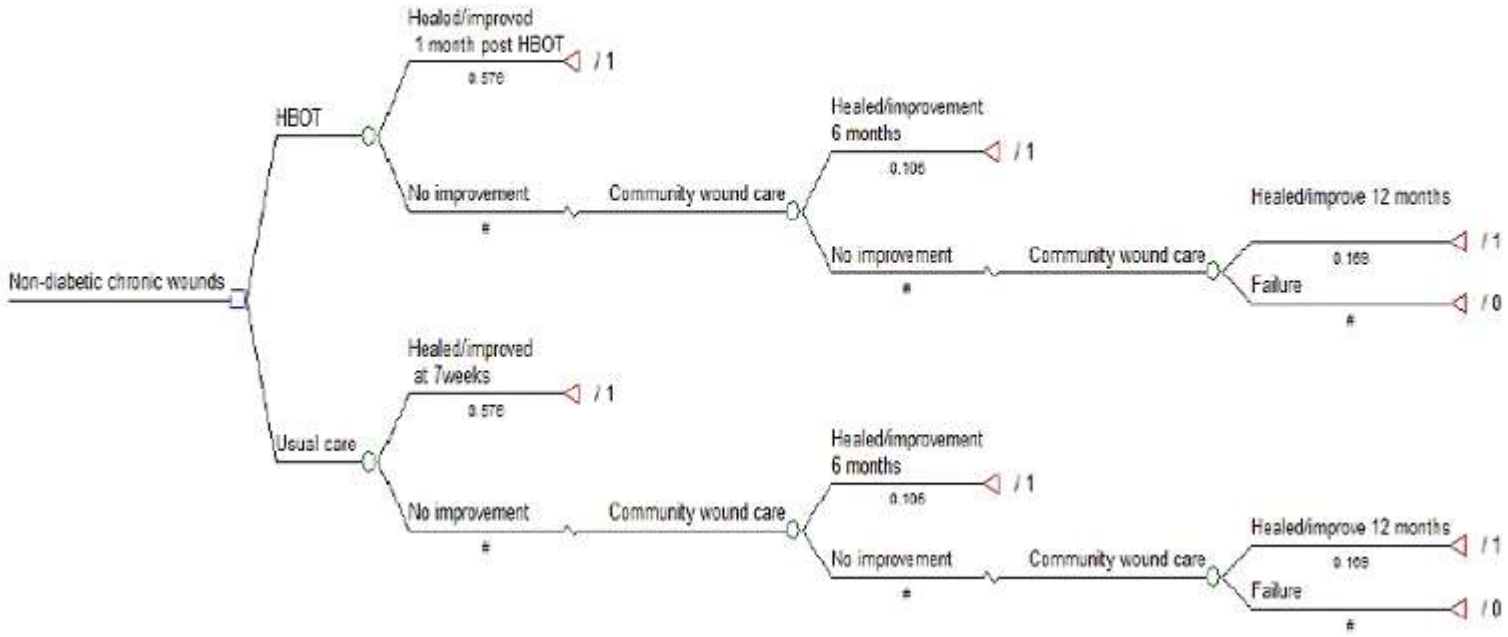
(On the surface, it would be assumed that all analysis after that point used this clinical pathway)
(Ref Pages 7, 33 MSAC 1054.1 report, and page 6 PSD)

Clinical flow chart: hyperbaric oxygen therapy for treatment of chronic non-diabetic wounds



However – the above pathway completely misrepresents how MSAC undertook the cost analysis, which compared HBOT head to head with standard care, assuming HBOT was a first line treatment (see below):

Decision tree: Chronic wounds



(Reference Pages 11, 89 MSAC 1054.1 and Page 10 PSD)

In addition, MSAC used the outcome data from the ANZHMG wound study and assumed the outcomes would be the same for community care. There are no outcomes available for community care after 6 months.

In the diagram above, the outcome after 3 months of community "usual" care shows 57.6% of wounds healed. (This is exactly the outcome that was determined when HBOT was added after 3 months of failed care.

Data from Gordon et al 2006 shows that only 8.9% of problem wounds heal with community care in the 3 to 6 month period.

This data was available to MSAC but they declined to use it. MSAC kept demanding randomised trial data, and rejected the data from the study that was set up following MSAC's own recommendations in 2003/4 (Attached sheet).

From the above cost analysis, MSAC 1054.1 calculated HBOT as first line treatment was $2151 per patient more expensive than usual care

The data presented in Table 2, page 11 of the MSAC report is highly relevant and indictes a fundam,ental reason to continue to fund HBOT:

Table 2 Costs of clinical pathways: chronic non-diabetic wounds

Description	Treatment	Cost
HBOT success (1 month)	1 year	$13,898
HBOT success (6 months)	1 year	$17,670
HBOT success (12 months)	1 year	$23,119
Usual care success (1 month)	1 year	$11,747
Usual care success (6 months)	1 year	$15,519
Usual care success (12 months)	1 year	$20,968
HBOT failure	1 year	$42,383
Usual care failure	1 year	$40,232

HBOT: hyperbaric oxygen therapy.

They have calculated that the cost of usual wound care FAILURE is $40,232 per annum.

The success rate for usual care in the Australian setting (Gordon et al, 2006) is only 44.6%. Hence there is a huge cohort of patients continuing to access Medicare funded treatments with poor success an at high cost.

HOWEVER

Applying HBOT as a second line treatment, (after 3 months failed community care), AND using all of the data that MSAC provided produces a completely different outcome for cost:

AVERAGE COST ALL PATIENTS COMMUNITY WOUND CARE TO 6 MONTHS = $28494 PER PATIENT
PERCENTAGE HEALED = 44.6%

AVERAGE COST ALL PATIENTS 3 MONTHS COMMUNITY CARE THEN HBOT COURSE = $22992 PER PATIENT
PERCENTAGE HEALED = 72.8%

Hence HBOT is a lower cost treatment by $5502 per patient, with better outcomes when applied after usual care has failed

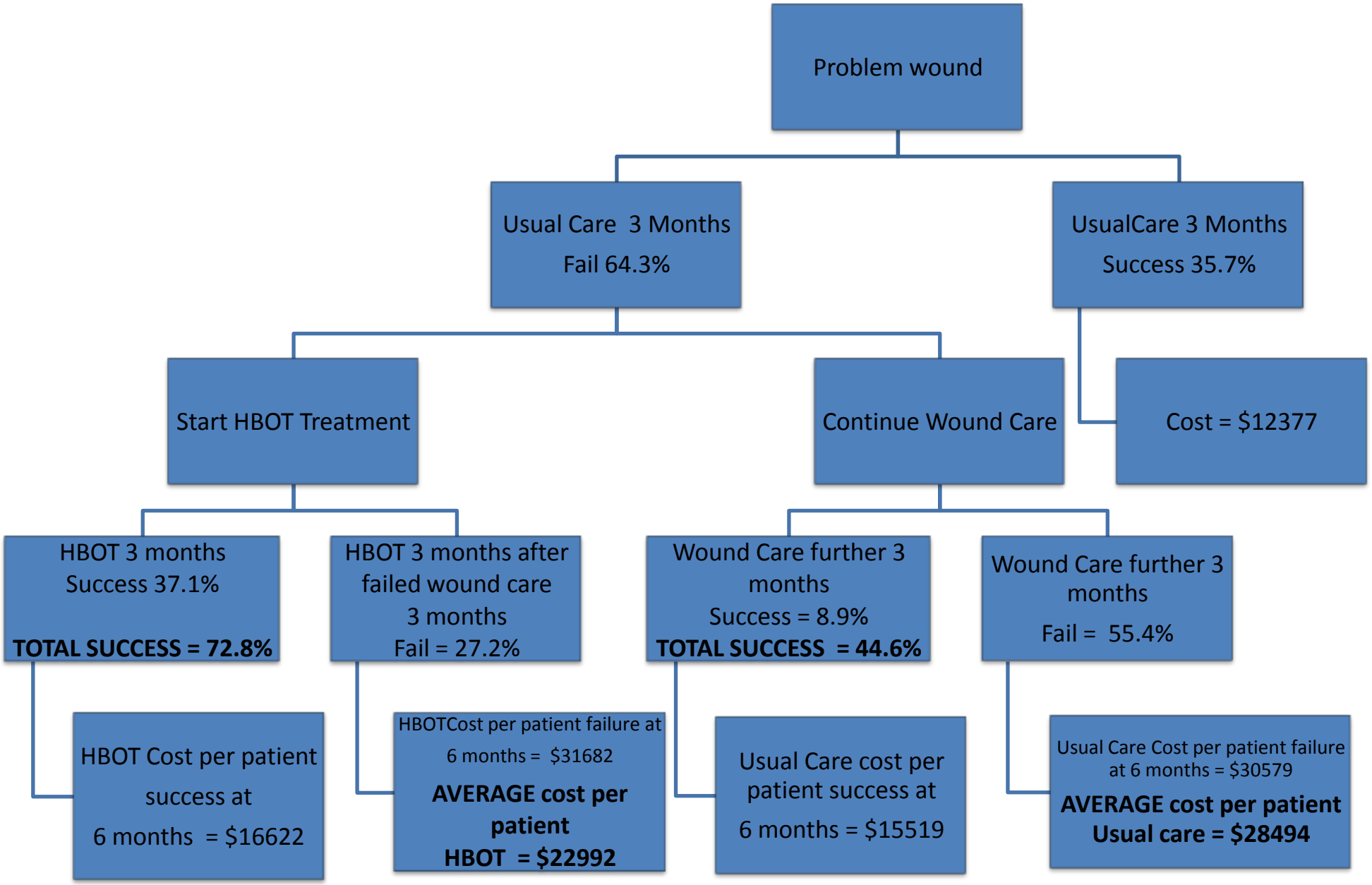
Despite recommending withdrawing funding for HBOT, at no stage has MSAC ever been able to demonstrate that outcomes are worse with HBOT. All evidence points to the opposite, and is acknowledged in the MSAC report:

"HBOT offers a viable, safe and non-invasive treatment to promote healing in patients where conventional treatment therapies have been found to be ineffective. Indeed there may be a good argument to introduce HBOT earlier in the treatment pathway to potentially significantly improve patients' clinical outcomes and quality of life, and avoid the more radical and invasive treatment strategies otherwise used for these conditions."

MSAC also acknowledged the ANZHMG Wound study and its results:

Although uncontrolled, this study represents a sizeable body of collective clinical data from Australian hyperbaric facilities, which measures the response of chronic problem wounds (those that have failed three months of standard treatment) to HBOT.

THE APPROPRIATE PATHWAY AND COST CALCULATION IS SHOWN IN THE FLOWCHART BELOW:


Problem wound
Usual Care 3 Months
Fail 64.3%
UsualCare 3 Months
Success 35.7%
Start HBOT Treatment
Continue Wound Care
Cost = $12377
HBOT 3 months
Success 37.1%
TOTAL SUCCESS = 72.8%
HBOT 3 months after failed wound care
3 months
Fail = 27.2%
Wound Care further 3 months
Success = 8.9%
TOTAL SUCCESS = 44.6%
Wound Care further 3 months
Fail = 55.4%
HBOT Cost per patient success at
6 months = $16622
HBOTCost per patient failure at
6 months = $31682
AVERAGE cost per patient
HBOT = $22992
Usual Care cost per patient success at
6 months = $15519
Usual Care Cost per patient failure at 6 months = $30579
AVERAGE cost per patient
Usual care = $28494

Briefing Prepared by

Associate Professor David Smart,
BMedSci, MBBS(Hons), MD(UTas), FACEM< FIFEM< FACTM, FAICD, DipDHM, CertDHM ANZCA

Dissenting Member MSAC 1054.1

Hon Chairman
Australian and New Zealand Hyperbaric Medicine Group
GPO Box 463
HOBART Tas 7001