



Mersey Burns

Developing an App From Idea to
Awards Success With No Funding

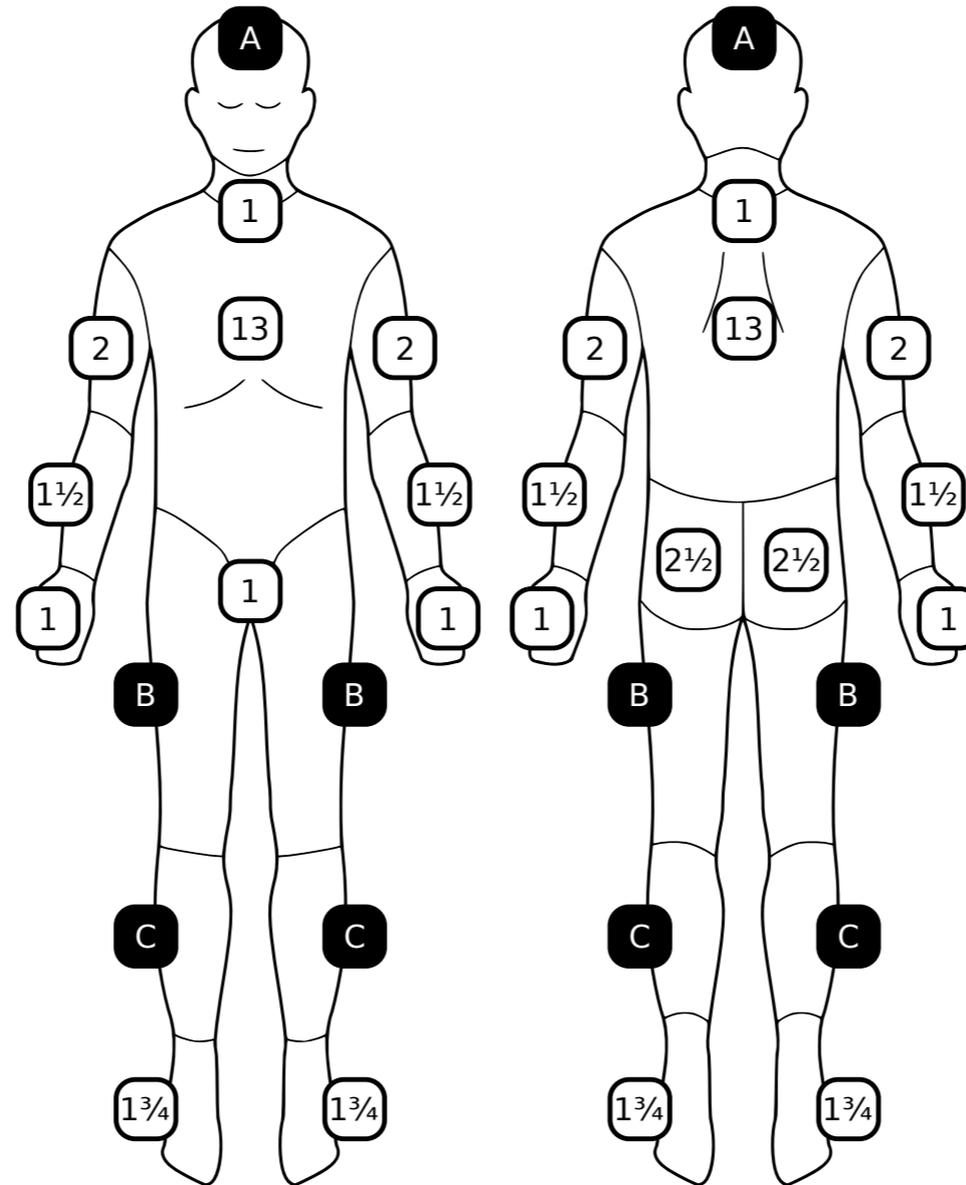
Mobile Healthcare Industry Summit, 25 Sep 2012

Chris Seaton

merseyburns.com

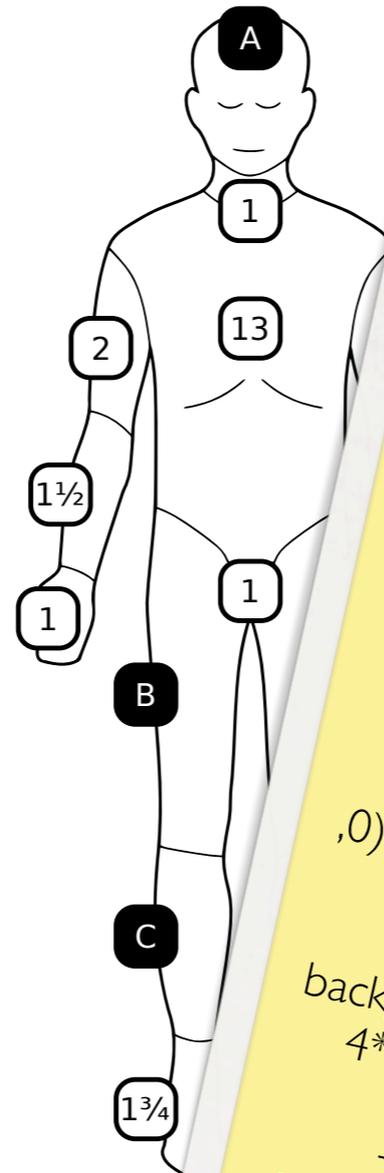
chris@merseyburns.com

Burn Area Calculation



Age	0	1	5	10	15	Adult
A	9½	8½	6½	5½	4½	3½
B	3	3	4	4½	4½	4½
C	2½	2½	3	3	3	3½

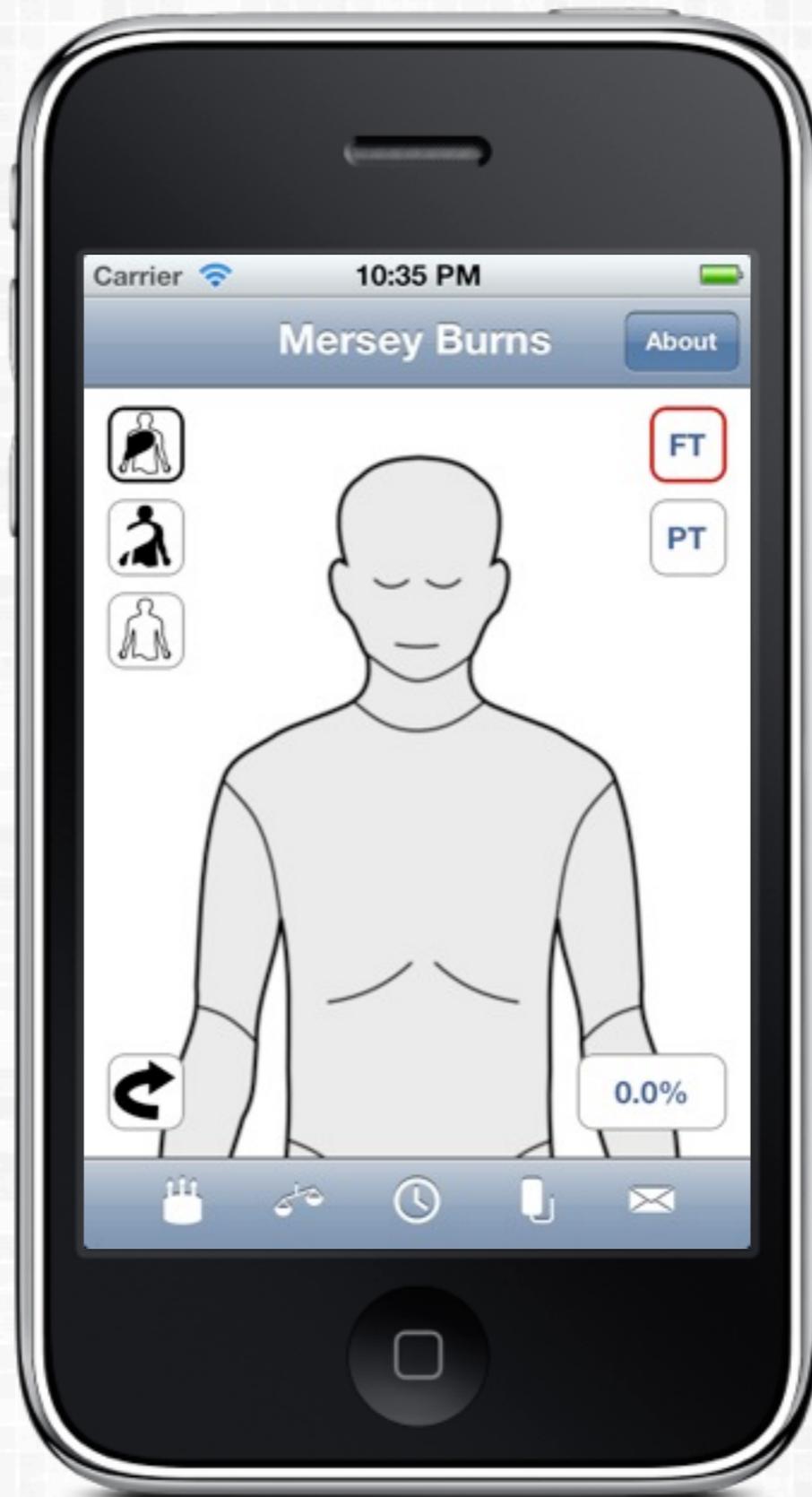
Burn Area Calculation



```

givefluids = IF(age < 18, burn >= 0.1, burn >= 0.15)
fluids = ROUND(IF(givefluids, burn * 100 * rate * weight, 0), 0)
firstperiod = IF(givefluids,
  IF(sinceburn >= 16 + 8, 0,
    IF(sinceburn >= 8, 0, 8 - sinceburn)
  ), 0)
secondperiod = IF(givefluids,
  IF(sinceburn >= 16 + 8, 0,
    IF(sinceburn >= 8, 16 + 8 - sinceburn, 16)
  ), 0)
background = IF(givefluids, IF(age < 16,
  4 * MIN(10, weight)
  + IF(weight > 10, 2 * MIN(10, weight - 10), 0)
  + IF(weight > 20, 1 * (weight - 20), 0)
, 0), 0) / 1000
  
```

Age	0	1	5	10	15	20
A	9½	8½	6½	5½	4½	3½
B	3	3	4	4½	4½	4½
C	2½	2½	3	3	3	3½



Carrier



10:35 PM



Mersey Burns

About



FT

PT



0.0%





Carrier

10:36 PM



Mersey Burns

About



FT

PT



10.9%





Carrier



10:36 PM



Weight

50kg

55kg

60kg

65kg

70kg

Done



Carrier  10:37 PM 

Fluids prescription

Age: Adult
Weight: 57kg
Burns: 22.2%
Time now: 22:37
Burn time: 22:35
Fluids rate: 4ml/h

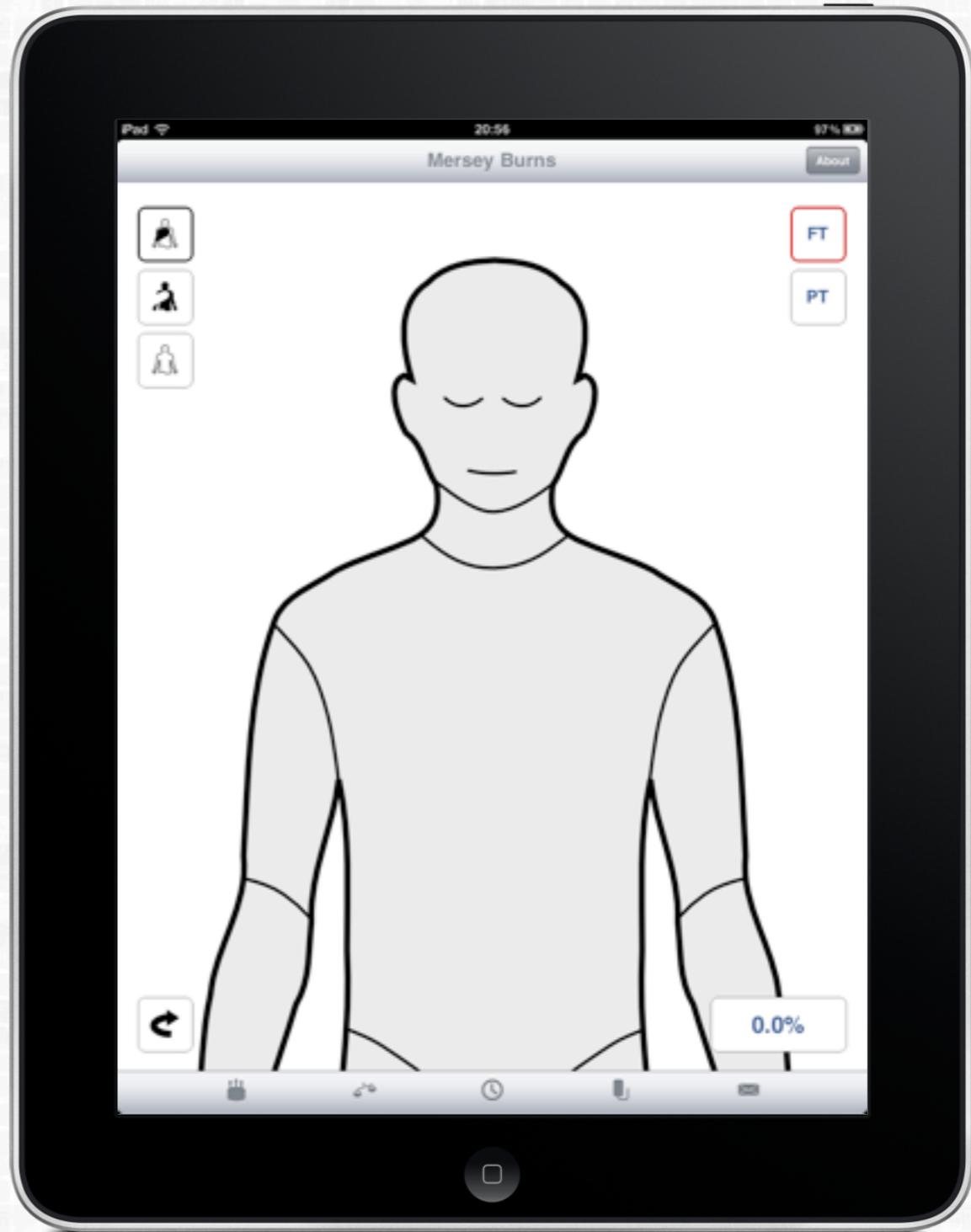
Give 2529ml in the first 08:00 hours
(316ml/hr), then 2529ml in the next 16:00
hours (158ml/hr).

Calculation based on Parkland.
Resuscitation fluids are Hartmann's solution.

Done

2ml/hr

4ml/hr



Implementing the Idea

- A good idea from clinicians but...
- No experience
- No funding
- No resources
- No spare time

Implementing the Idea

- Partnership with a developer
- Created prototypes
- Created our own media interest, won prizes, now have proper NHS funding
- Achieved regulation

What We Found

- A working app was what we needed to convince everyone
- Ran a small clinical study
- Not just more convenient – inherently more accurate than pen and paper

Free to Users

- Available on the usual App Store, free
- Clinicians can bring their own devices
- No support needed from the hospital trust
- No burden on IT departments
- Anyone can evaluate

Free to Users

- After proving the App we received funding from the NHS Merseyside and Chester Healthcare Innovation and Education Cluster
- Institutions can work with us to specialise it to their protocols and requirements
- IT departments can work with us to integrate it into their systems

Impact

- Coverage on BBC Online, TV, Radio, national newspapers
- Winner, 2011 Excellence in Innovation prize, NHS North West Health Innovation Awards
- Finalist, 2012 eHealth Insider Awards



Search for 'mersey burns'
– it's free!

Chris Seaton
merseyburns.com
chris@merseyburns.com