



# Making a difference through practice led pressure ulcer research **Professor Jane Nixon Deputy Director Institute of Clinical Trials** Research **University of Leeds**



# Making a difference through practice led pressure ulcer research

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**VRRINY YOBFF** 

# **Impact of Pressure Ulcers on QOL**



# UK world leading pressure ulcer prevention clinical research

Critical mass Australia, Japan, Germany, the Netherlands, Belgium and USA



UK has 4 fundamental ingredients

- 1. Nursing research agenda
- 2. Research funding through National Institute for Health Research Large trials, Programme Grants, Research for Patient Benefit, Fellowships
- 3. Clinical Research Networks Research Nurse infrastructure
- 4. Clinical Trials Units/Methodologists





#### **Research areas/pathways- Leeds**



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PURPOSE

# Pain and pressure ulcers

Living with a pressure ulcer Qualitative study

Patients reported pain preceding PU development and said nurses ignored their concerns

Living with a pressure ulcer QOL and Pain systematic reviews

Pain worst symptom of having a pressure ulcer. Pain impacts upon quality of life and is not addressed by hcps





# Pain and pressure ulcers









# Pain and pressure ulcers

#### Is pain important in predicting Category 2 PU development? Cohort study hospital and community populations

	Variable	Odds Ratio	p-value
30+ centres, 634 patients analysis population 602.	Presence of category 1 PU(yes vs no)	3.25	<0.0001
	Presence of skin alterations(yes vs no)	1.98	0.0014
	Presence of pain on a normal, altered or Category 1 skin site(yes vs no)	1.56	0.0931





# **Severe PU**

- Inquiry style study (Laming Inquiry, 2003)
- Innovative retrospective case study design to examine whole system failures

## **Results:**

- Clinicians fail to listen to patients/carers
- Clinicians fail to assess risk/respond to superficial PUs
- Co-ordination failures
- Current practice of investigation does not include patient account and as a result there are gaps





# **Risk Assessment**

## Which of your patients are at risk?

Multiple risk factors – which risk factors are most important? Only 0.34% of hospital patient admissions will develop a pressure ulcer.



PURPOSE

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# **PU Risk Factor Systematic Review**

## **Research Question:**

Which risk factors are independently predictive of PU development in surgical, medical and community-based populations?

#### Result

15 Risk factor Domains 46 Sub-Domains How useful is this for clinical practice?

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# Flow of studies:







# **PU Risk Factor Systematic Review**

# **Key Risk Factor Themes included:**

Immobility
Skin condition
Perfusion (including diabetes)

## Less consistently emerging themes included:

MoistureBody temperatureNutritionAgeGenderMental StatusRaceSensory PerceptionMedicationGeneral Health StatusHaematological measures







#### **Risk Assessment Framework**

Aim: to agree a pressure ulcer risk factor minimum data set (MDS) to underpin the development & validation of a risk assessment framework (RAF) for use in clinical practice.

Phase 1 Development of evidence base

PU Risk Factor Systematic Review to identify risk factors independently predictive of PU development

**Pre-Clinical** 

Phase 2 Consensus study

Agree: - risk factors & assessment items for inclusion in draft risk factor MDS & RAF - Conceptual

framework development

**Pre-Clinical** 

Phase 3 Design & Pre-Test

 RAF Design
Assess & improve acceptability, usability, format, design, clarity, comprehension language & data completeness of draft RAF with clinical nurses Phase 4 Clinical Evaluation

 Evaluate reliability, data completeness, clinical usability, & validity (convergent & known groups) of preliminary RAF

Clinical

Phase 5 Long-term Implementation & Clinical Evaluation - Dissemination of RAF into routine NHS care - Predictive Validity testing - Multivariable modelling & revision of RAF

Clinical







**Consensus methods** 

# Questionnaires Face to face meetings















#### **Risk Factor Progression**



- 24. Race
- 25. Gender
- 26. Age

### Initial draft of the RAF and underpinning MDS



## Pre-test - Focus Groups











#### Take home messages













## Ask and listen to patients



**Problem solve for complex patients** 

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## Acknowledgement

**PURSUN** (Pressure UlceR Service User Network)

**NIHR**: This presentation presents independent research funded by the National Institute for Health Research (NIHR) under its Programme Grants for Applied Research Programme (RP-PG-0407-10056). The views expressed in this presentation are those of the author(s) and not necessarily those of the NHS, the NIHR or the Department of Health.







Tissue Viability Society

Student Competition to be launched Student Rate £35.00 per day