

# Lifespan Evaluation Group (LEG)

NPUAP

S3I Meeting

Las Vegas, Nevada

April 27, 2003

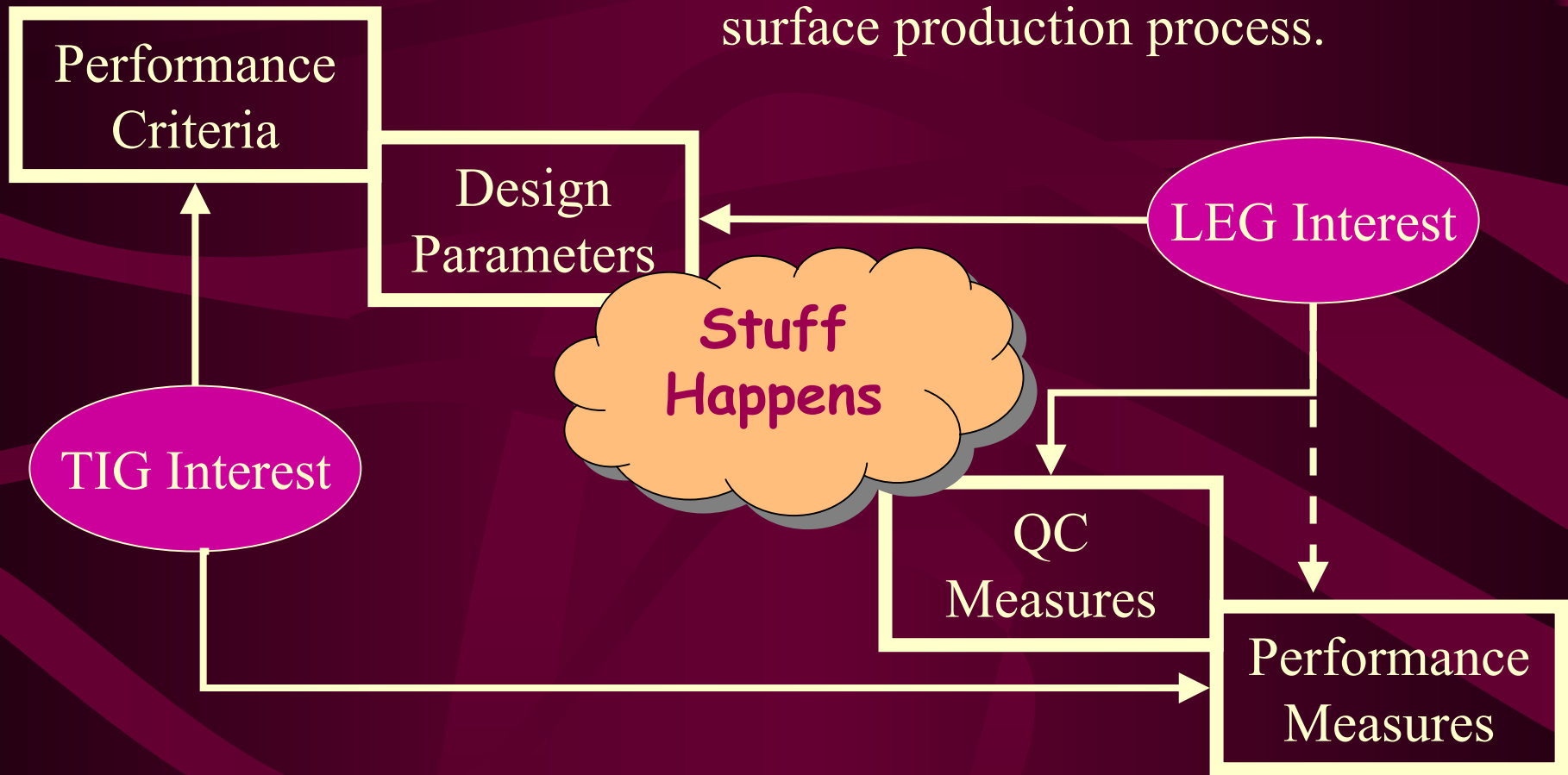
# LEG Mission

*Identify metrics and methods for demonstrating the changing condition of a support surface (due to fatigue in regular use or environmental effects) relative to its “out-of-the-box” design specifications.*



# LEG Relationship to TIG

Consider a “typical” support surface production process.



# LEG Relationship to TIG (con't)

## TIG Variables

- Pressure (related to user)
- Envelopment of user
- Material Properties
- Environment / Microclimate effects on user

## LEG Variables

- Pressure (related to mechanism)
- Dimensions of product
- Product Features
- Environmental effects on product
- Changes in TIG variables with use

# LEG Goals for 2003

Establish draft test methods for Lifespan Evaluation variables and begin to test the test methods.



*S3I Annual Report 2002*

# LEG Next Steps

- Research existing standards relating to support surface characteristics / metrics
- Collect information relating to test facilities and methods, provided by Industry participants
- Coordinate with TIG and T&D in their development of test metrics and methods

# Characteristics Researched by LEG Task Groups

- Internal Pressure (High and Low)
- Air/Fluid Distribution within non-powered
- Temperature and Ambient Pressure effects
- Dimensions
- Rotation

# Characteristics Researched by TIG or T&D

- Weight Capacity: TIG + extra weight
- MVTR: TIG
- Duration and Frequency of pressure changes: T&D

# LEG Task Group Leaders

- Jeanne Perla
  - Air Distribution – Non-Powered
  - Temperature / Ambient pressure effects
- Lydia Biggie
  - Rotation
- TBD
  - Internal Pressure
  - Dimensions

# LEG Outcomes

- Develop Measurements and Test Methods to:
  - Establish critical performance/design measures
  - Simulate use
  - Quantify change in performance over time



# LEG Outcomes (con't)

- Identify Key Indicators to:
  - Signal performance drop below design parameters



The screenshot shows the Oral-B website's product page for the Oral-B Indicator toothbrush. The page features a navigation bar with links for 'Ask Us', 'International Sites', and 'About Us'. Below the navigation bar are tabs for 'What's New', 'Learning Center', and 'Dental Professionals'. The main content area is titled 'Oral-B® Indicator®' and includes a large image of the toothbrush. The text describes the product's smart feature: the blue bristles fade to white when it's time to replace the brush. A list of product features is provided at the bottom.

[Ask Us](#) [International Sites](#) [About Us](#)

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[Toothbrushes](#) • [Floss & Interdental](#) • [Toothpaste & Mouth Rinse](#)

## Oral-B® Indicator®

So smart, it reminds you when it's time for a new one. ~~Did you know that a new toothbrush removes up to 38% more plaque than a 3-month-old toothbrush?~~<sup>1</sup> The blue Oral-B® Indicator® bristles on the Oral-B® Indicator® fade to white when it's time to replace your brush and its ~~new ergonomically designed handle offers exceptional comfort and control.~~

### Product Features

- + Blue Oral-B® Indicator® bristles fade halfway so you know when to replace your brush
- + Ergonomically designed handle for comfort and control
- + Polished end-rounded bristles are gentle on teeth and gums

[More Product Information](#)