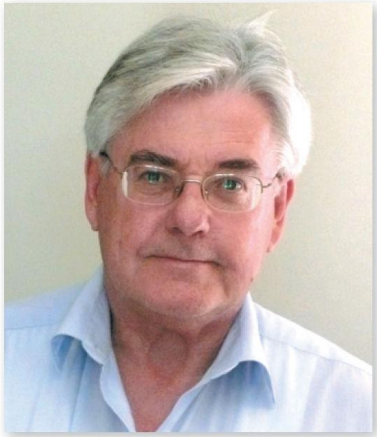


Professor Nik Bogduk

Professor

Pain Medicine

University of Newcastle

Sunday, June 11, 2017

9:45 - 10:10 GP Management of Acute Low Back Pain

MANAGEMENT OF
ACUTE LOW BACK PAIN
In PRIMARY CARE

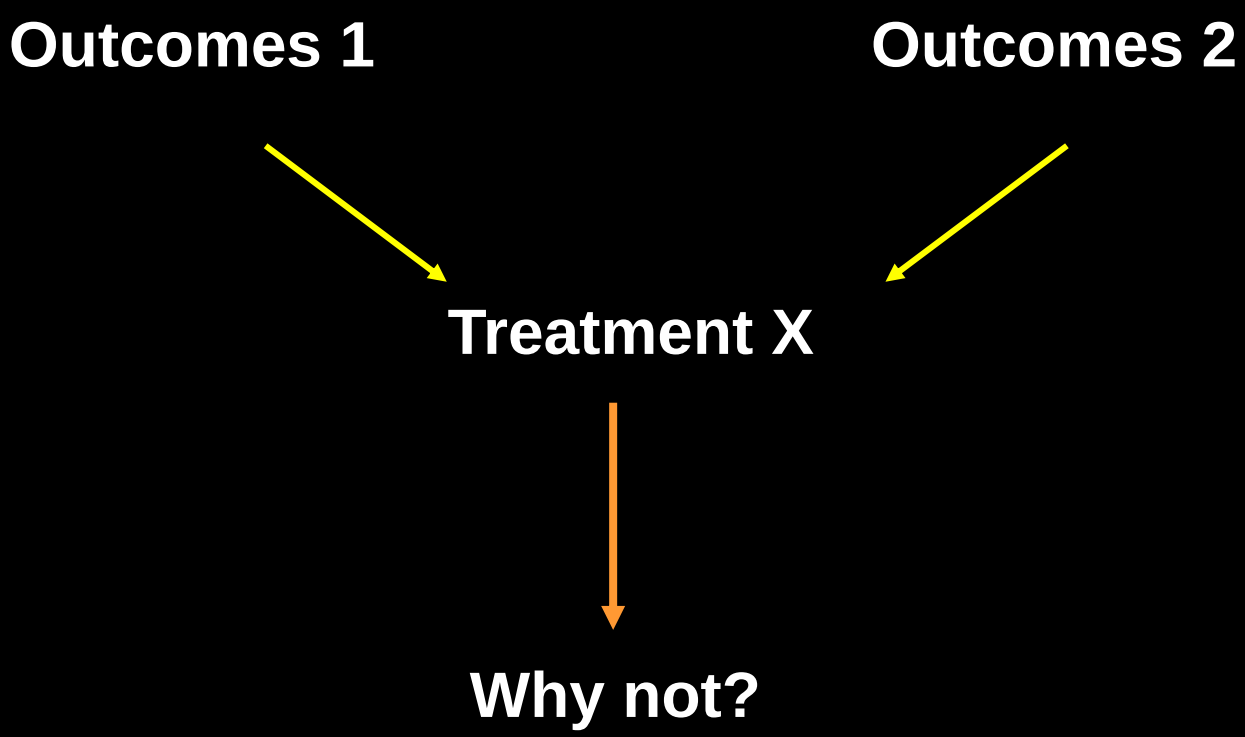
Nikolai Bogduk

Emeritus Professor

of Pain Medicine

University of Newcastle

TWO STORIES



OUTCOMES 1: Back pain in primary care, no workers comp

FEATURE	X	UC
Number	430	83
Number Men	199	40
Number Women	231	43
Age	47	53
Age Men	47	51
Age Women	47	57 *
Duration (weeks)	2.5	2.1
VAS for Pain	46	41

FEATURE	X	UC
Bodily Pain	0.40	0.39
Physical Functioning	0.63	0.65
Role Physical	0.00	0.00
Social Functioning	0.72	0.70
Role Emotional	0.80	0.80
General Health	1.06	1.06
Mental Health	0.97	1.00
Vitality	0.83	0.81

OUTCOMES

FEATURE	X	UC
Physiotherapy	0.06	0.46 *
Rest	0.02	0.40 *
Formal exercises	0.28	0.35
Hot/cold packs	0.06	0.25 *
Local anaesthetic	* 0.17	0.01
Referral to specialist	0.01	0.03

FEATURE	X	UC
Physiotherapy	0.06	0.46 *
Rest	0.02	0.40 *
Formal exercises	0.28	0.35
Hot/cold packs	0.06	0.25 *
Local anaesthetic	* 0.17	0.01
Referral to specialist	0.01	0.03

FEATURE	X	UC
Physiotherapy	0.06	0.46 *
Rest	0.02	0.40 *
Formal exercises	0.28	0.35
Hot/cold packs	0.06	0.25 *
Local anaesthetic	* 0.17	0.01
Referral to specialist	0.01	0.03

FEATURE	X	UC
Simple analgesics	0.21	0.28
Compound analgesics	0.02	0.05
Lesser opioids	0.07	0.25 *
NSAIDs	0.16	0.39 *
X-ray	0.07	0.30 *
CT	0.02	0.10 *
MRI	0.00	0.01

FEATURE (not prescribed)	X	UC
Simple analgesics	0.21	0.28
Compound analgesics	0.02	0.05
Lesser opioids	0.07	0.25 *
NSAIDs	0.16	0.39 *
X-ray	0.07	0.30 *
CT	0.02	0.10 *
MRI	0.00	0.01

FEATURE (not prescribed)	X	UC
Simple analgesics	0.06	0.20 *
NSAIDs	0.07	0.23 *
Heat	0.08	0.30 *
Liniment	0.02	0.17 *
Physiotherapy	0.06	0.06
Chiropractic	0.05	0.08
Massage	0.07	0.16
Complementary	0.07	0.23 *

FEATURE (not prescribed)	X	UC
Simple analgesics	0.06	0.20 *
NSAIDs	0.07	0.23 *
Heat	0.08	0.30 *
Liniment	0.02	0.17 *
Physiotherapy	0.06	0.06
Chiropractic	0.05	0.08
Massage	0.07	0.16
Complementary	0.07	0.23 *

FEATURE (not prescribed)	X	UC
Simple analgesics	0.06	0.20 *
NSAIDs	0.07	0.23 *
Heat	0.08	0.30 *
Liniment	0.02	0.17 *
Physiotherapy	0.06	0.06
Chiropractic	0.05	0.08
Massage	0.07	0.16
Complementary	0.07	0.23 *

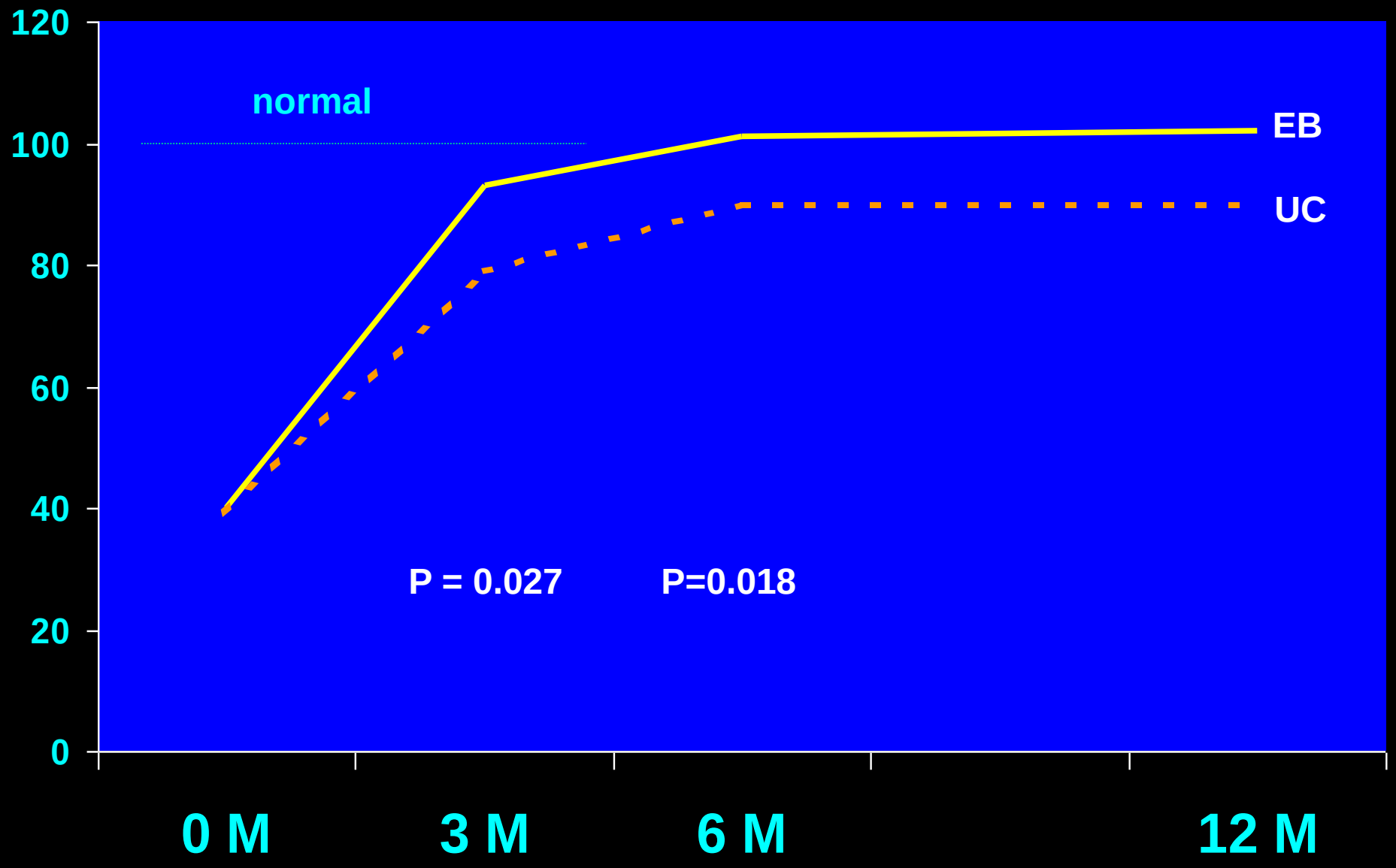
RED FLAGS

Upon presentation **1.4%**

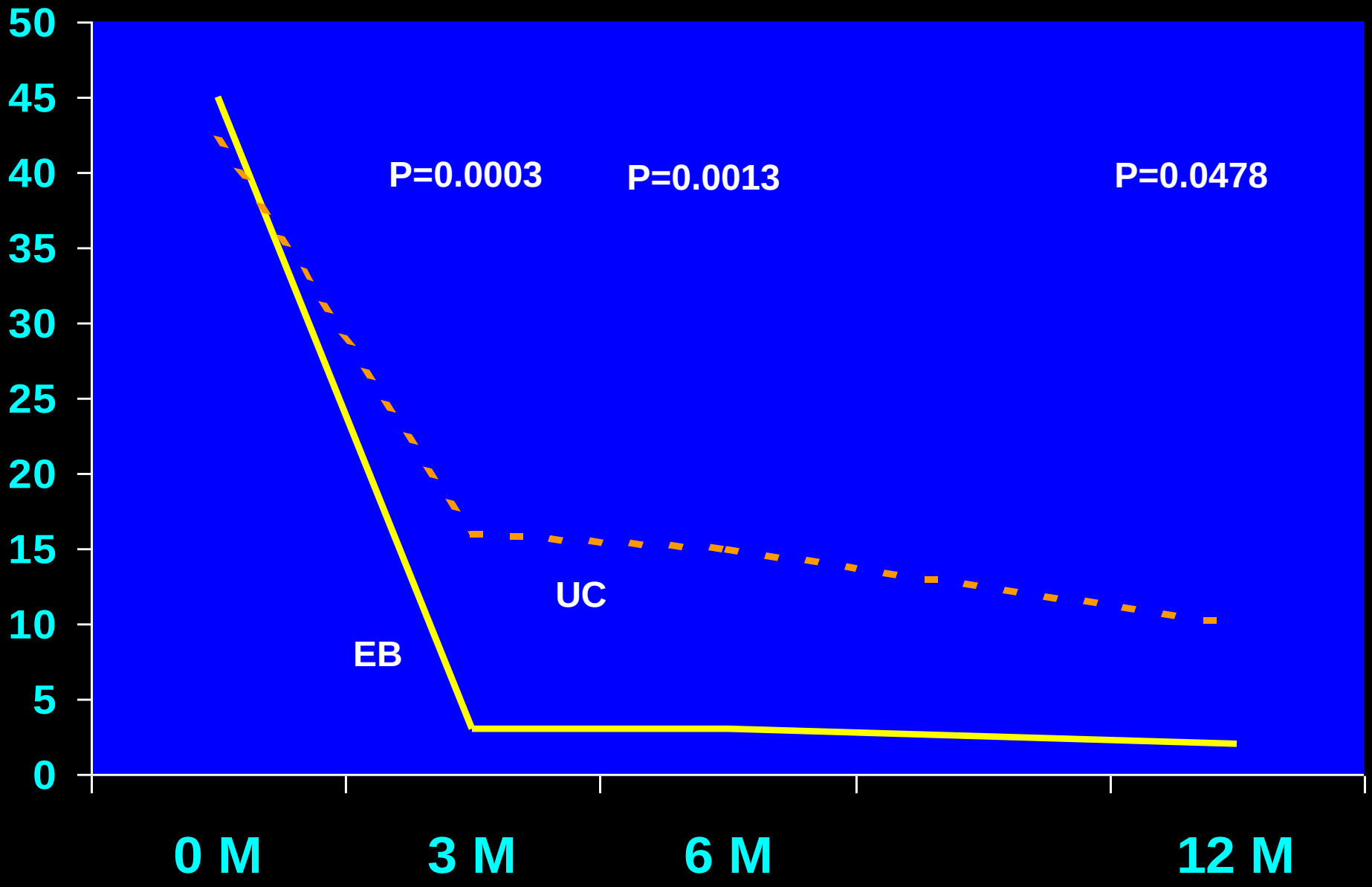
- 2 osteoporotic fracture
- 1 crush fracture
- 1 carcinoma of kidney
- 1 carcinoma of liver
- 1 carcinoma of prostate

During follow-up **0.0%**

BODILY PAIN



VAS - cohort


50
45
40
35
30
25
20
15
10
5
0
P=0.0003
P=0.0013
P=0.0478
UC
EB
0 M
3 M
6 M
12 M

OTHER

OUTCOME MEASURES

TREATMENT HELPFULNESS

	Harmful	Neutral	Helpful	Extremely Helpful
EB	0.00	0.01	0.17	0.82 **
UC	0.00	0.16	0.41	0.43

P = 0.000

CONTINUING CARE	PROPORTION					
	3M		6M		12M	
	EB	UC	EB	UC	EB	UC
NO CONTINUING CARE	0.72 *	0.56	0.73 *	0.53	0.77 *	0.68
CONTINUING CARE	0.28	0.44	0.27	0.47	0.23	0.37

RECOVERY AND RECURRENCE

3 MONTHS

PROPORTION

	EB	UC
Worse	0.03	0.11
No change	0.08	0.20
Improved	0.21	0.19
RECOVERED	0.67	0.49
Recurrence		
Recurrence Rate	not applicable	

RECOVERY AND RECURRENCE

12 MONTHS

PROPORTION

	EB	UC
Worse	0.17	0.19
No change	0.09	0.13
Improved	0.04	0.12
RECOVERED	0.71	0.56
Recurrence	0.11	0.14
Recurrence Rate	16%	27%

RECOVERY AND RECURRENCE

12 MONTHS

PROPORTION

	EB	UC
Worse	0.17	0.19
No change	0.09	0.13
Improved	0.04	0.12
RECOVERED	0.71	0.56
Recurrence	0.11	0.14
Recurrence Rate	16%	27%

AVERAGE COSTS:

SERVICE	X	UC
Initial consultation	62	27
Subsequent consultations	138	28
Physiotherapy	12	113
Specialist consultation	2	2
Office procedures	7	1
Drugs and other treatment	13	109

AVERAGE COSTS:

SERVICE	X	UC
X-ray	4	27
CT	6	31
MRI	1	6
Fluoroscopy	0	
Ultrasound		2
Bone Scan	2	
Pathology	1	2

AVERAGE COSTS:

SERVICE	X	UC
PRESCRIBED SERVICES	248	348 *
TREATMENT NOT PRESCRIBED BY DOCTOR	28	124 *
TOTAL	$ 276	$ 472 *

ACUTE LOW BACK PAIN

not complicated by Workers Compensation factors

Has a good prognosis

Patients can expect full recovery

Low recurrence rate

Regardless of how it is managed

TREATMENT X

Short-term

Slightly less pain

LESS IMAGING

LESS NSAIDs

Greater satisfaction

LESS ALTERNATIVE CARE

LESS EXPENSIVE

Long-term

Slightly less pain

LESS CONTINUING CARE

Greater Recovery Rate

LESS EXPENSIVE

TREATMENT X

Confident

Convincing

Caring

Concern

Concerted

explanation

assurance

activation

remain at work

McGuirk B et al.

The safety, efficacy, and cost-effectiveness of evidence-based guidelines for the management of acute low back pain in primary care.

Spine 2001; 26:2615-2622.

Bogduk N, McGuirk B.

Medical Management of Acute and Chronic Low Back Pain. An Evidence-Based Approach.

Elsevier, Amsterdam, 2002.

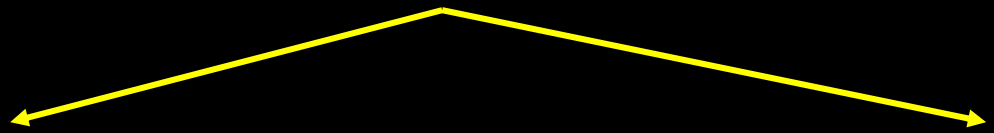
OUTCOMES 2: Back pain with workers comp

HUNTER AREA HEALTH SERVICE

HUNTER AREA HEALTH SERVICE

1 Jan 2001 – 30 June 2003

253 cases of Acute LBP



Seen by Occ Med	Direct to GP
191	62

GROUP II

uncomplicated

N = 61

GROUP IV

Psychosocial

N = 84

GROUP III

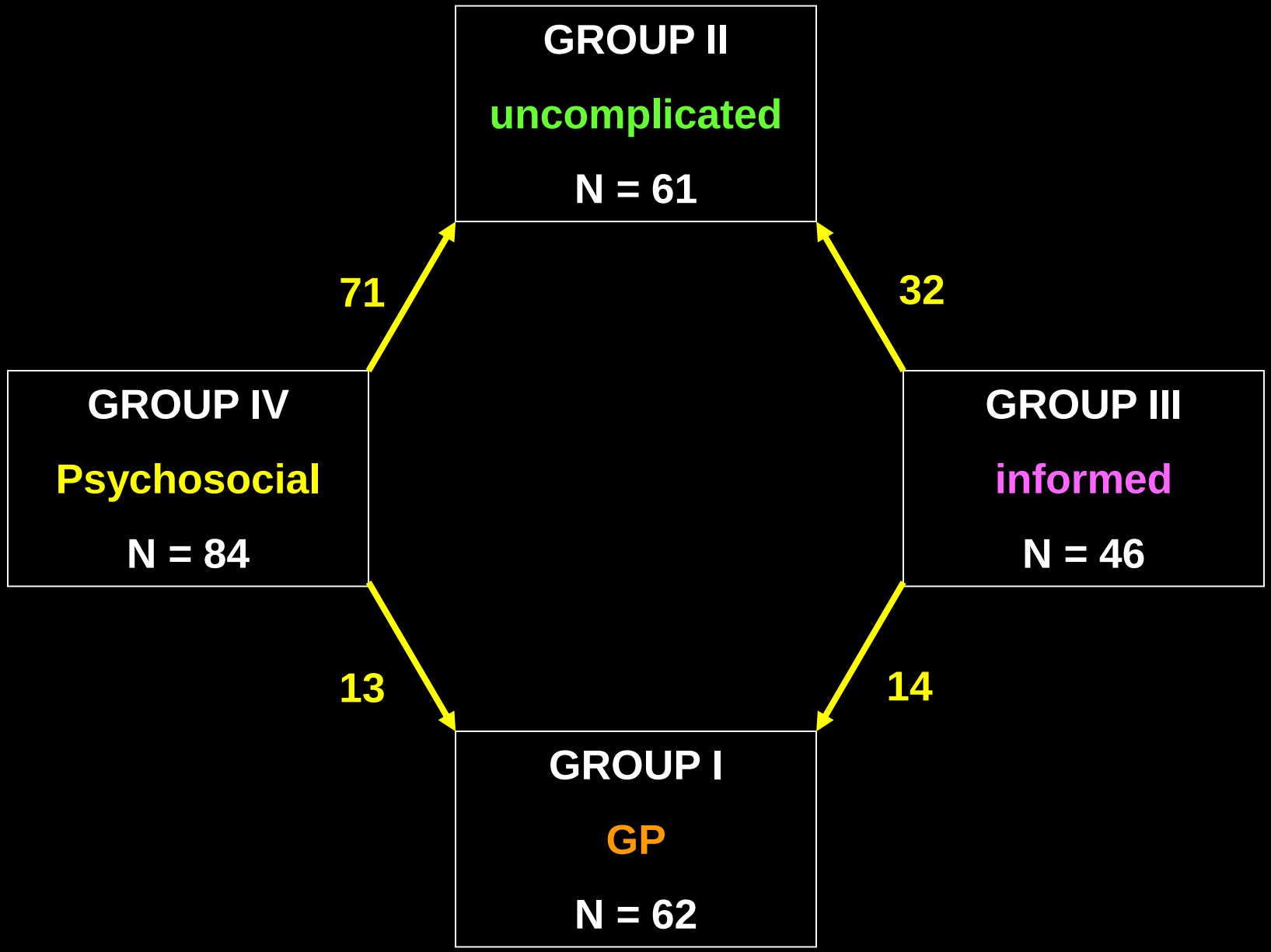
informed

N = 46

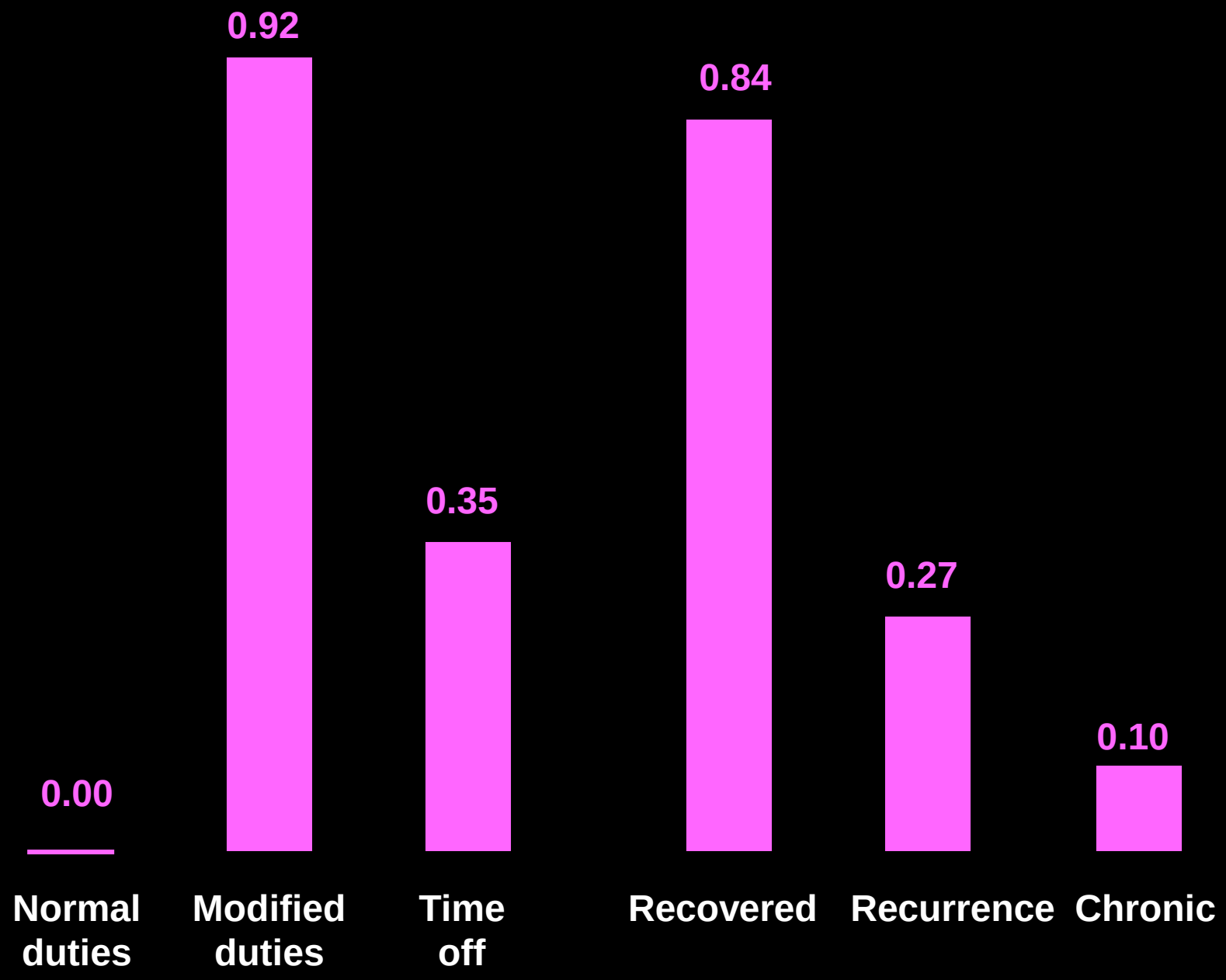
GROUP I

GP

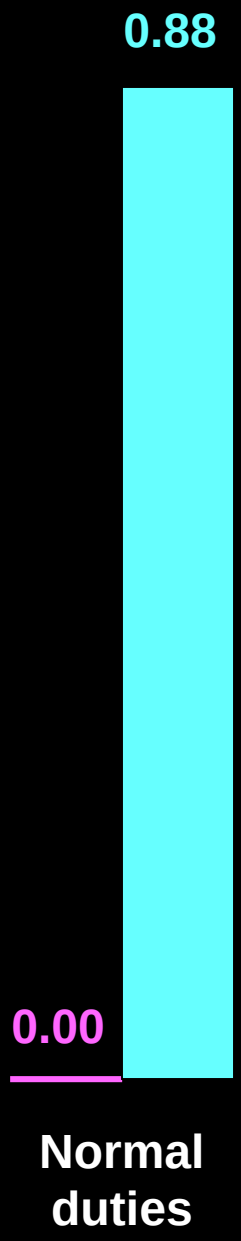
N = 62


GROUP II
uncomplicated
N = 61
71
32
GROUP IV
Psychosocial
N = 84
GROUP III
informed
N = 46
13
14
GROUP I
GP
N = 62

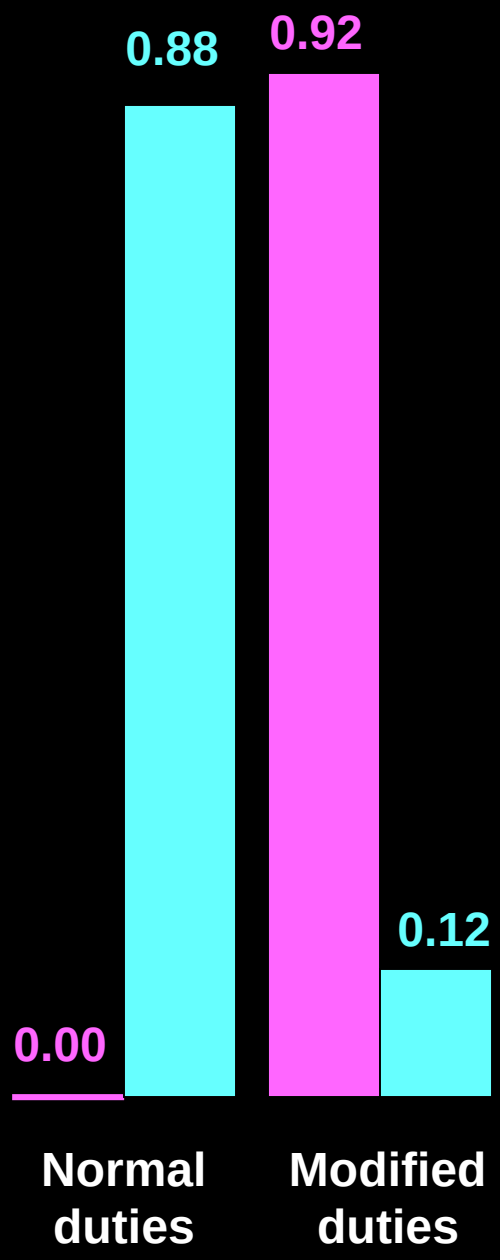
USUAL CARE N = 62



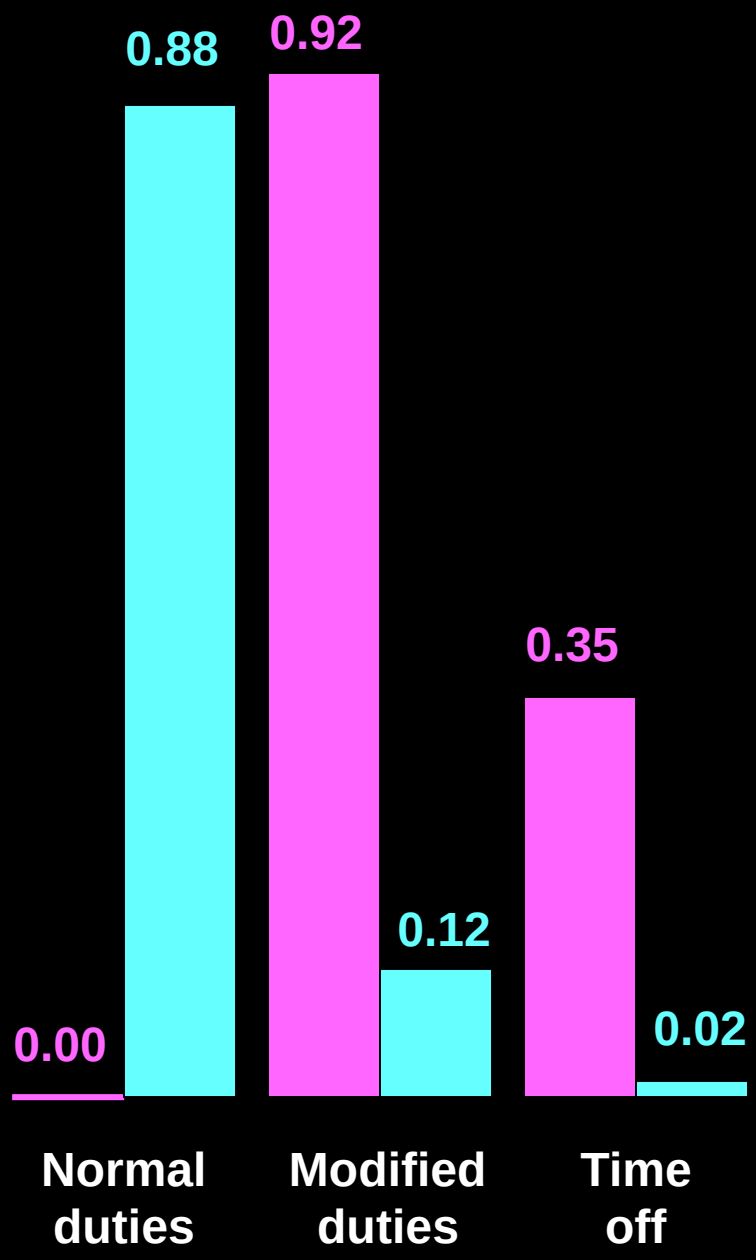
EB CARE N = 61



EB CARE N = 61

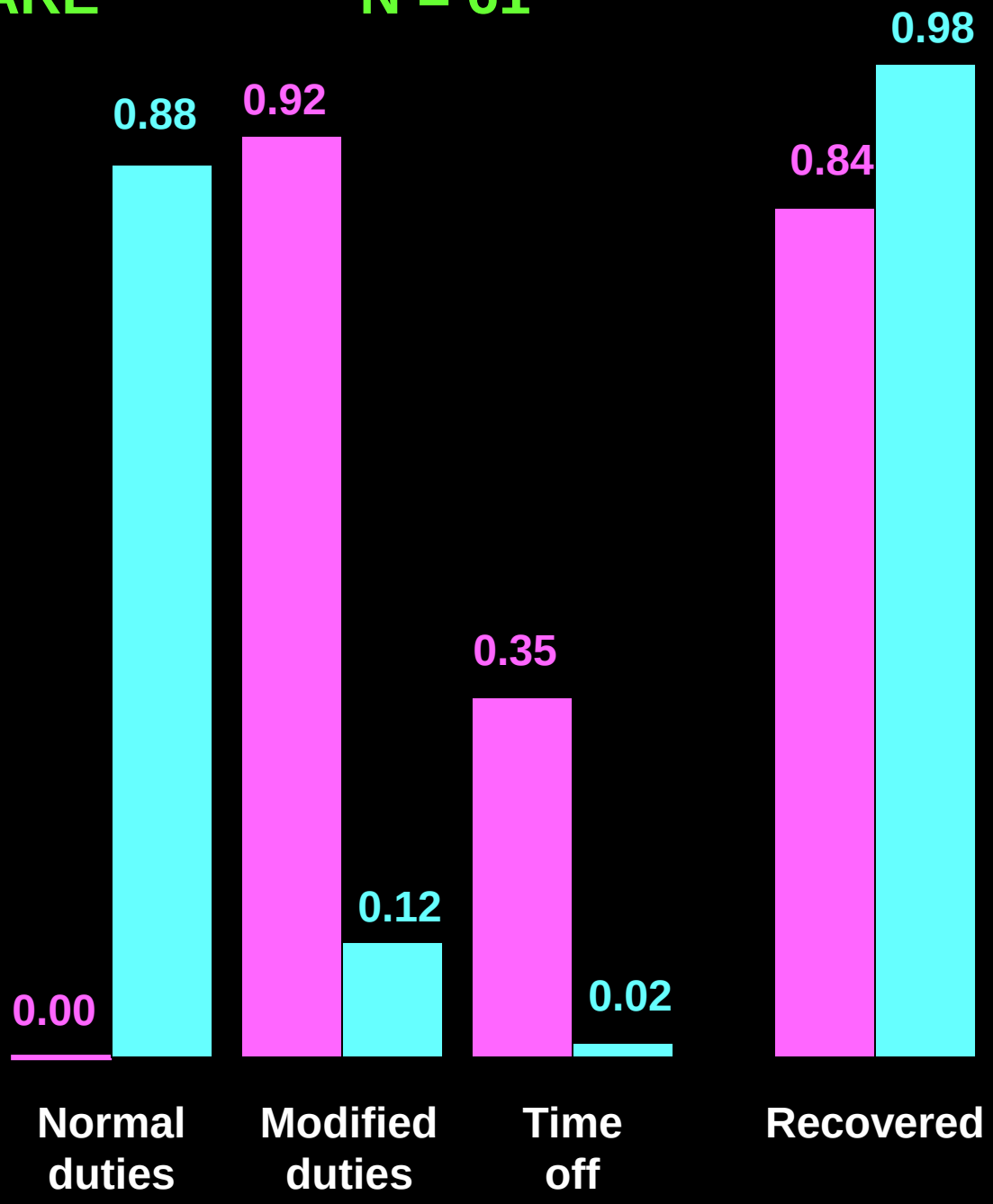


EB CARE N = 61


0.88
0.92
0.00
0.12
0.35
0.02
Normal duties
Modified duties
Time off

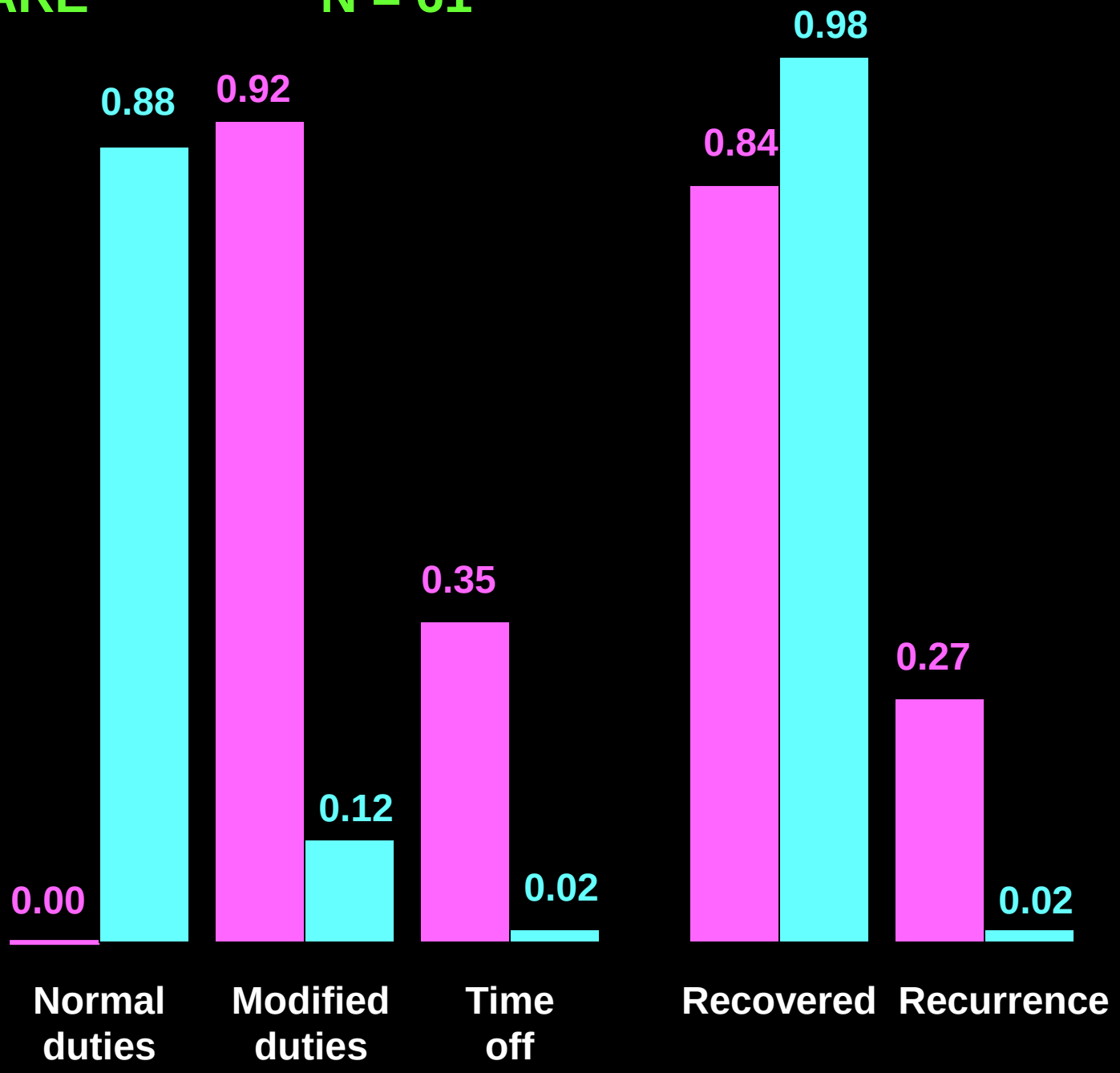
EB CARE

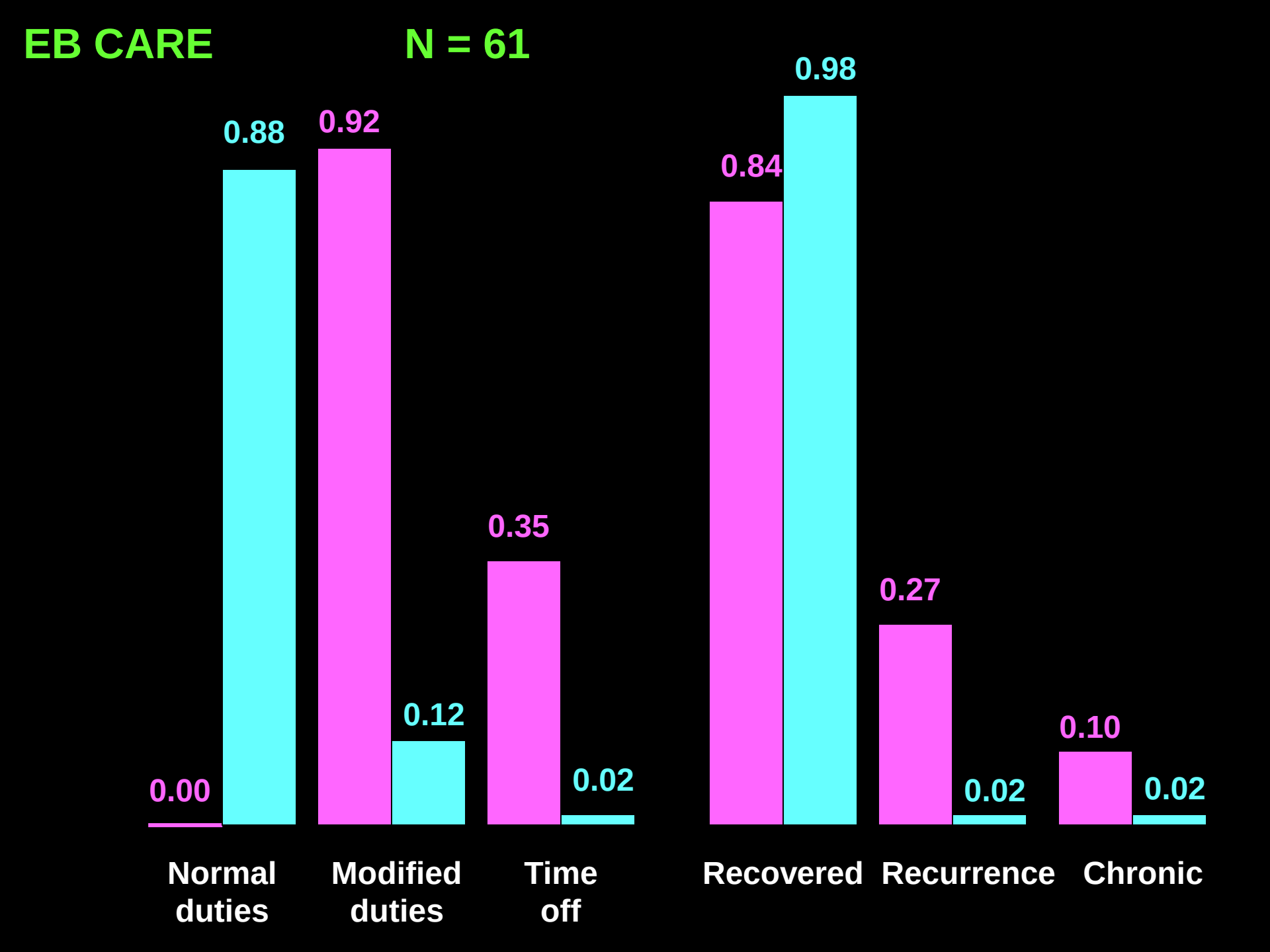
N = 61


0.00
0.88
0.92
0.12
0.35
0.02
0.84
0.98
Normal duties
Modified duties
Time off
Recovered

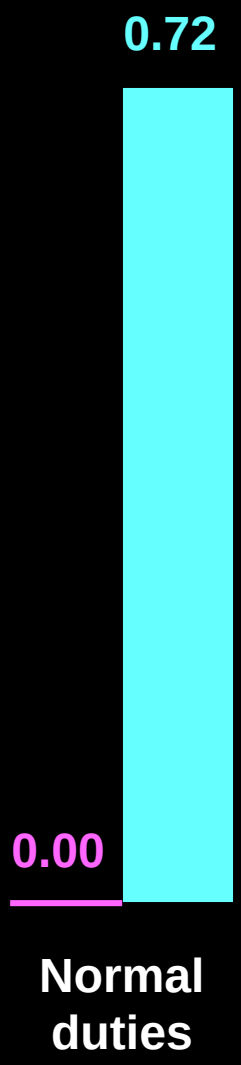
EB CARE

N = 61

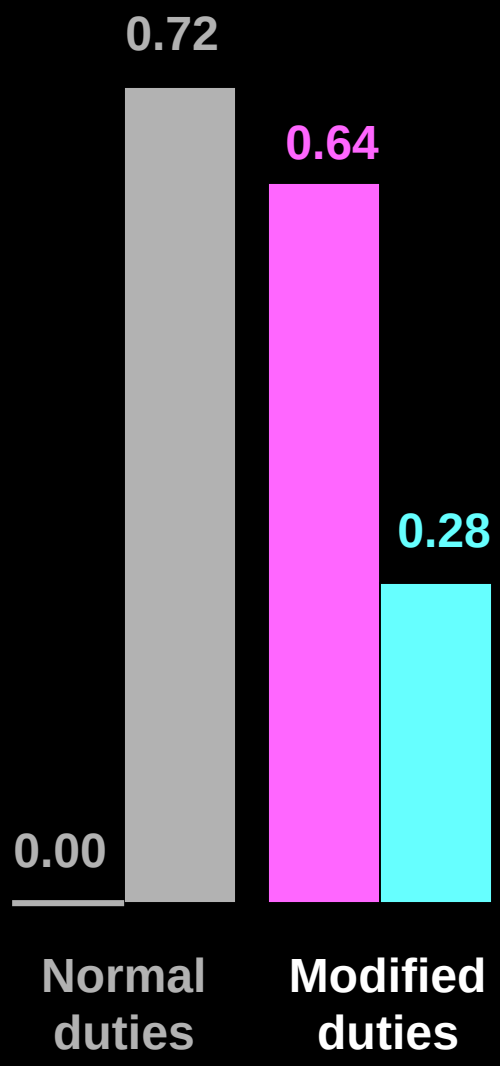

0.00
0.88
0.92
0.12
0.35
0.02
0.84
0.98
0.27
0.02
Normal duties
Modified duties
Time off
Recovered
Recurrence


EB CARE
N = 61
0.00
0.88
0.92
0.12
0.35
0.02
0.84
0.98
0.27
0.02
0.10
0.02
Normal duties
Modified duties
Time off
Recovered
Recurrence
Chronic

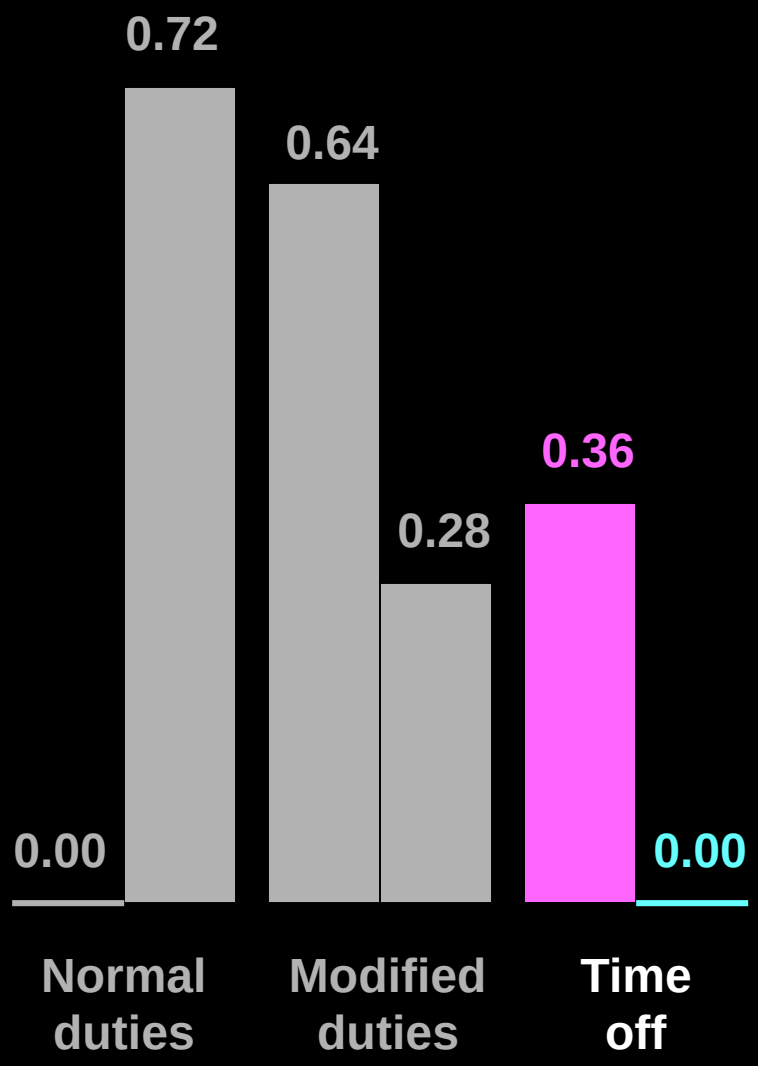
INFORMED N = 32 + 14

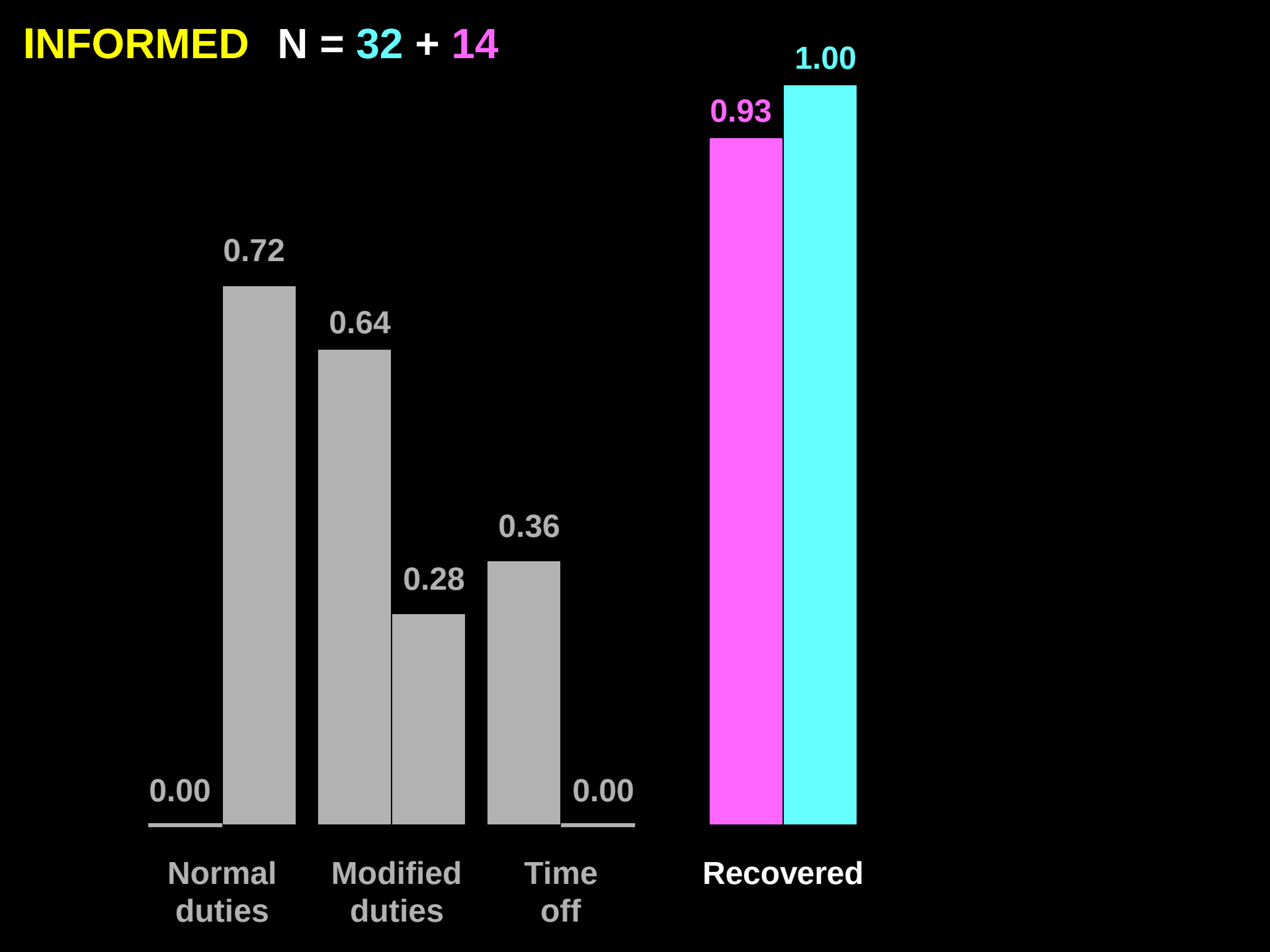


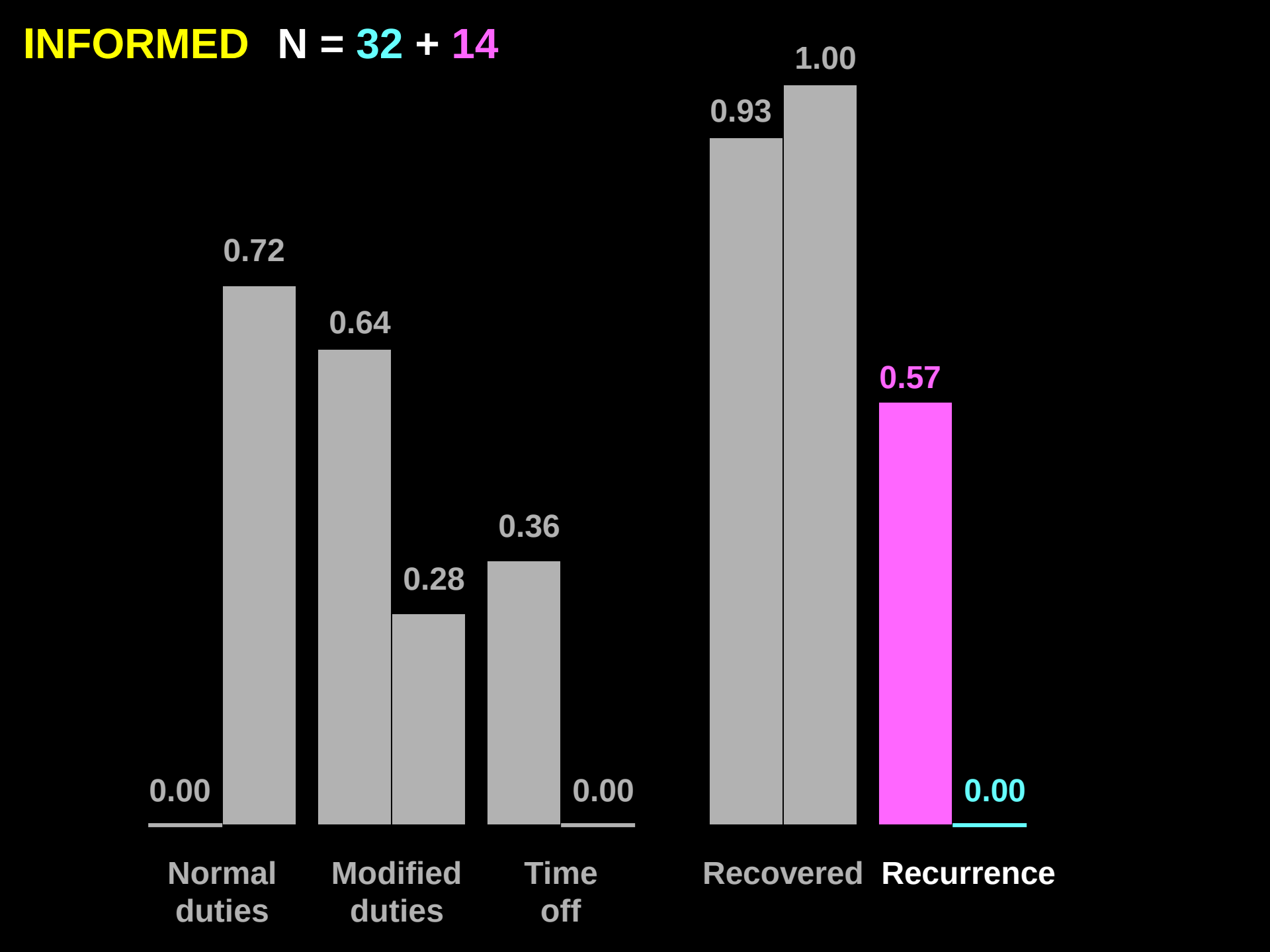
INFORMED N = 32 + 14

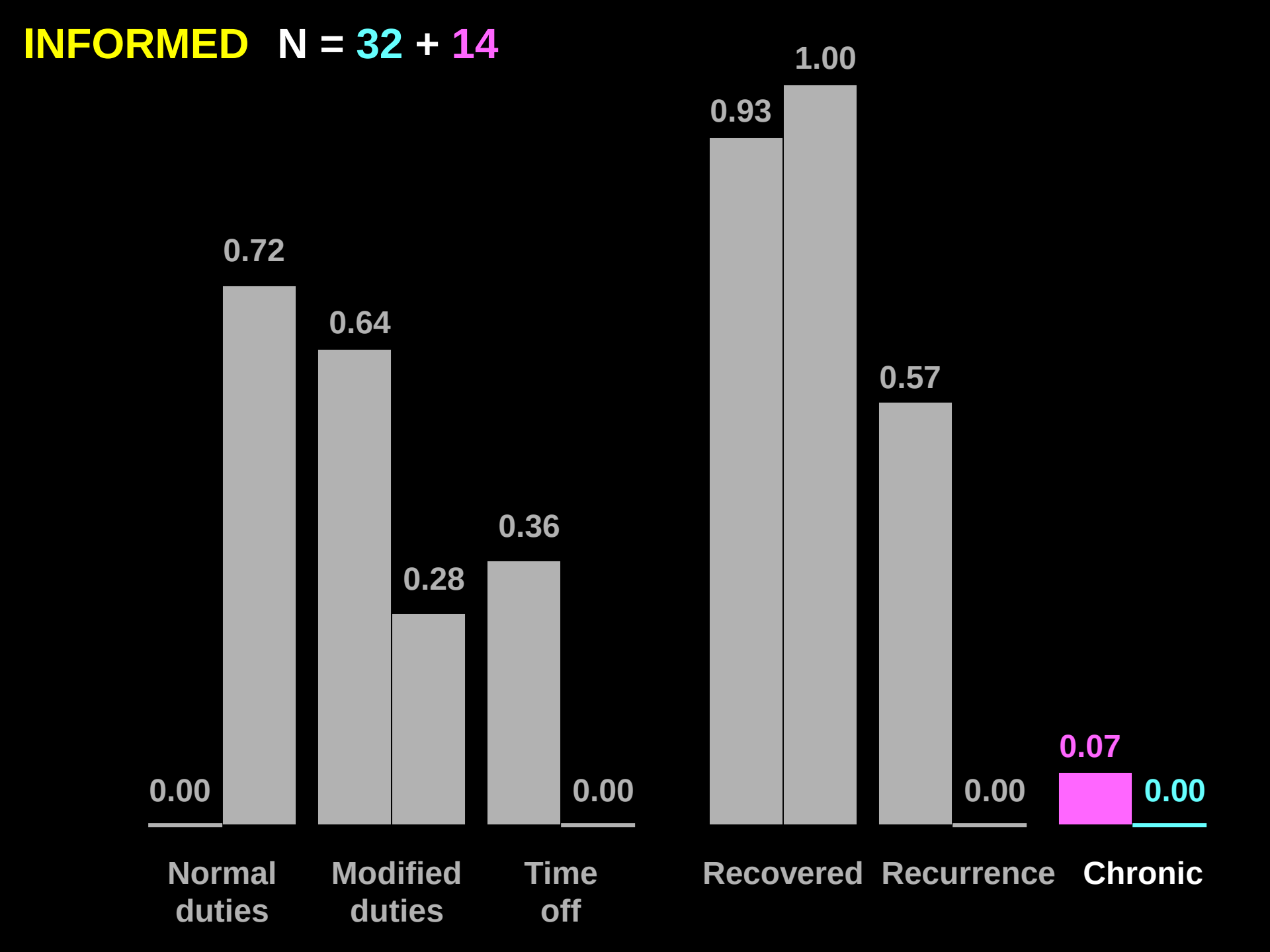


INFORMED N = 32 + 14

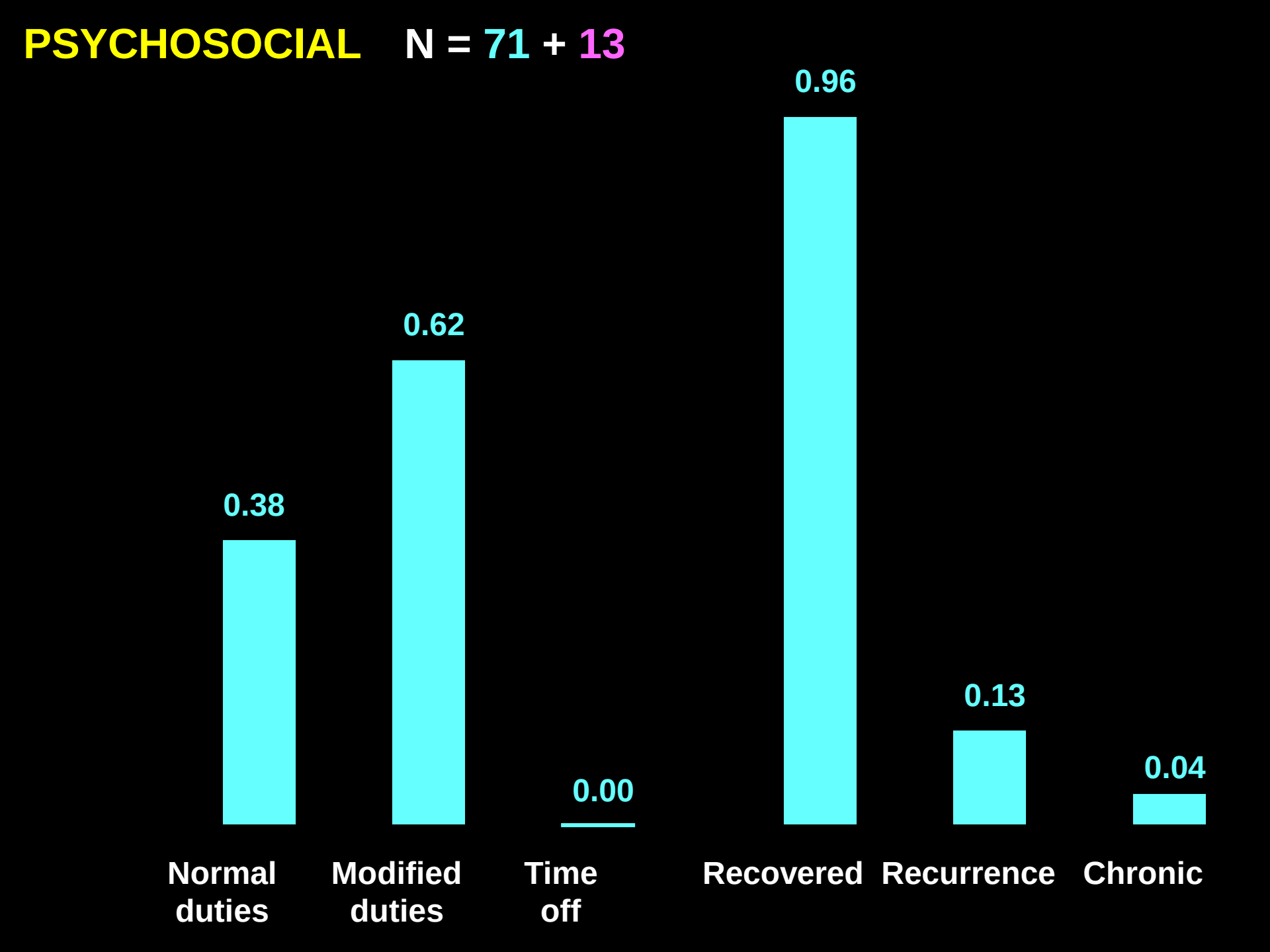



INFORMED N = 32 + 14
0.00
0.72
0.64
0.28
0.36
0.00
0.93
1.00
Normal duties
Modified duties
Time off
Recovered

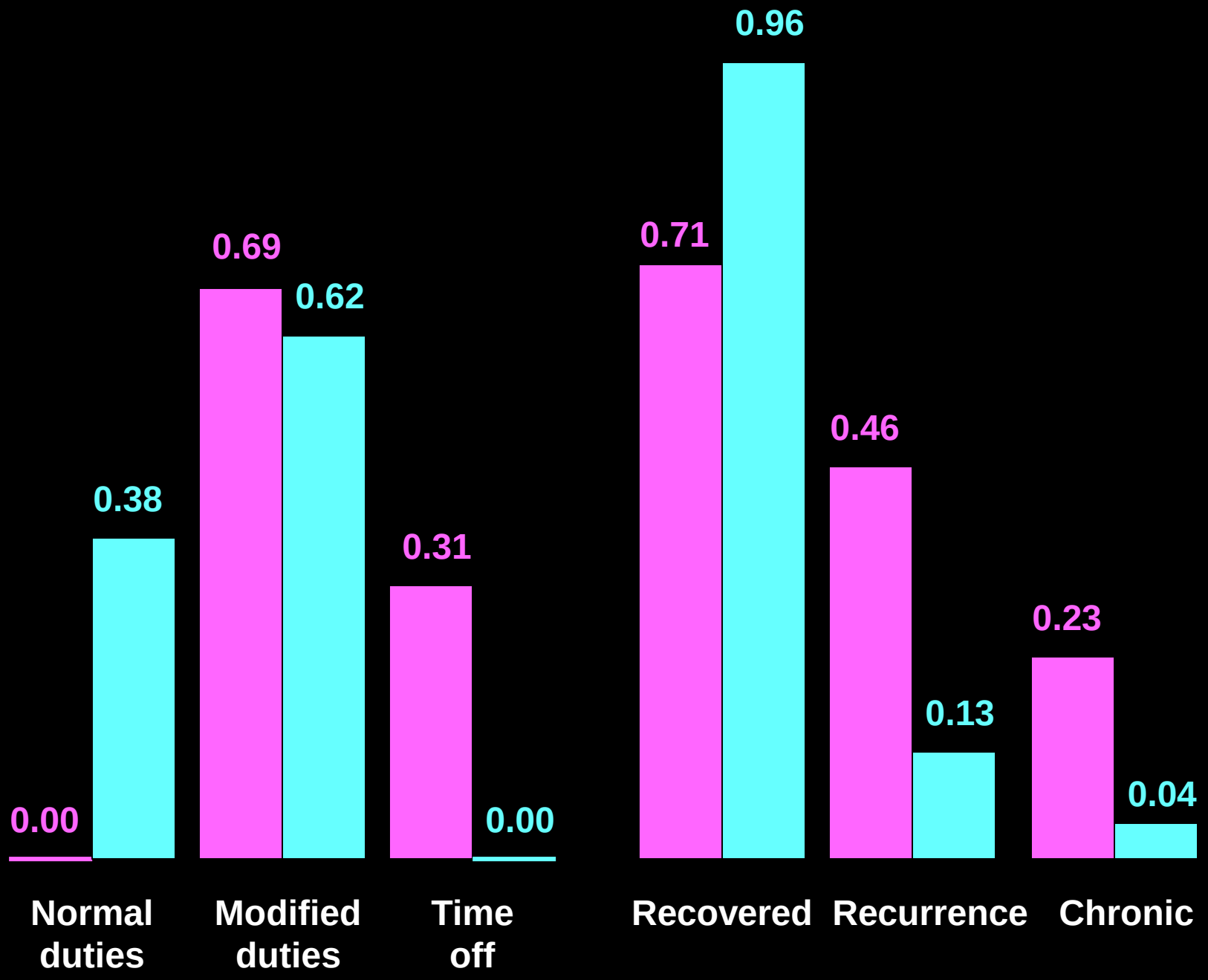

INFORMED N = 32 + 14
0.00
0.72
0.64
0.28
0.36
0.00
0.93
1.00
0.57
0.00
Normal duties
Modified duties
Time off
Recovered
Recurrence


INFORMED N = 32 + 14
0.00
0.72
0.64
0.28
0.36
0.00
0.93
1.00
0.57
0.00
0.07
0.00
Normal duties
Modified duties
Time off
Recovered
Recurrence
Chronic

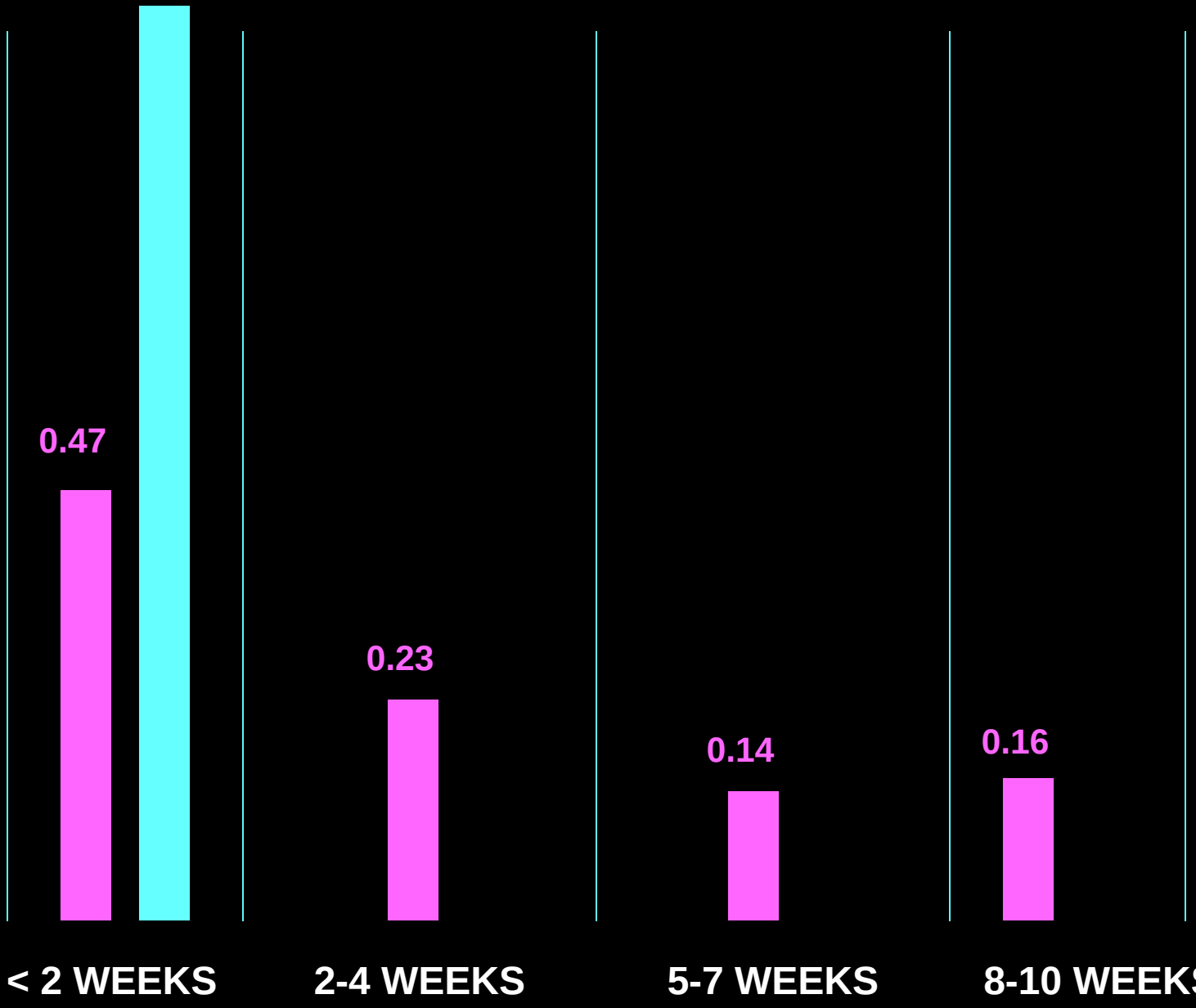
PSYCHOSOCIAL N = 71 + 13



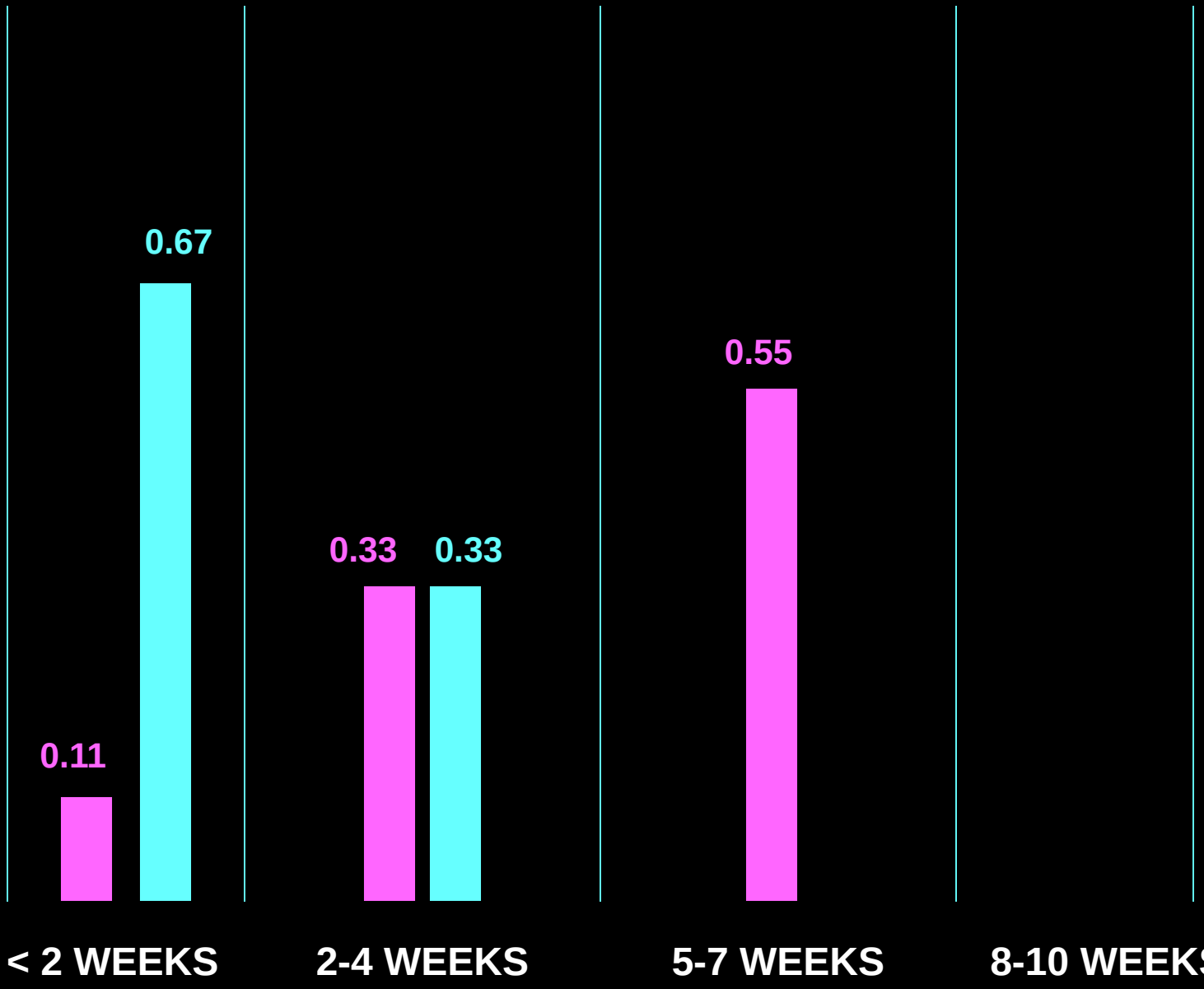
PSYCHOSOCIAL N = 71 + 13



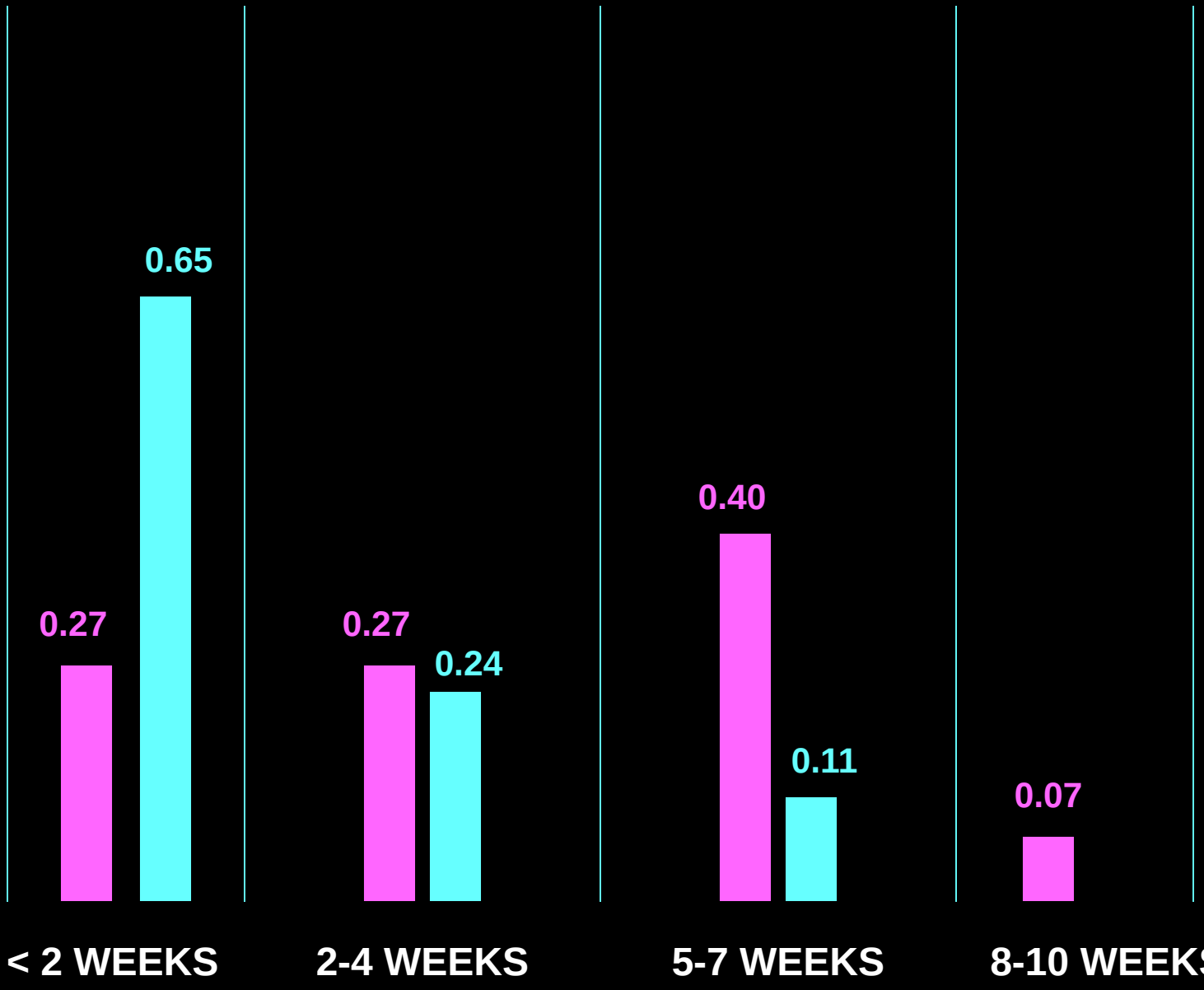
Modified duties: UNCOMPLICATED



Modified duties: INFORMED



Modified duties: PSYCHOSOCIAL



ACUTE LOW BACK PAIN

eligible for **Workers Compensation**

Has a good prognosis

Patients can expect full recovery

Low recurrence rate

IF it is managed by EBM

McGuirk B, Bogduk N.

Evidence-based care for low back pain in workers eligible for compensation.

Occup Med 2007; 57:36-42.

TREATMENT X

Confident

Convincing

Caring

Concern

Concerted

explanation

assurance

activation

remain at work

WHY NOT?

WHY NOT?

Habit?

Time?

Cost?

Confidence?

Training?

McGuirk B et al.

The safety, efficacy, and cost-effectiveness of evidence-based guidelines for the management of acute low back pain in primary care.

Spine 2001; 26:2615-2622.

McGuirk B, Bogduk N.

Evidence-based care for low back pain in workers eligible for compensation.

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Australian Acute Musculoskeletal Pain Guidelines Group.

EVIDENCE-BASED MANAGEMENT OF ACUTE MUSCULOSKELETAL PAIN.

Australian Academic Press, Brisbane, 2003

[Online. Available at http://nhmrc.gov.au