

ASSANDOH'S GUIDE TO HOSPITAL STAFFING (AGOS) CHART

INTRODUCTION

Projecting and proper management of the staffing needs of every healthcare organization plays a significant role in improving employee satisfaction, and to a large extent, better patient outcomes.

However, the complex nature of staffing schedules for many hospitals and large organizations, makes executing this administrative function an uneasy task. It goes beyond just assigning a group of individuals to a particular unit or ward.

In most instances, the nature of hospital work requires staff to be present all day on a shift based system. Though hospital operations do not halt on weekends and legal holidays, the nurse manager/supervisor must ensure that each staff benefits from some stipulated days of rest per week (mostly 2days) and also from every legal holiday. Aside that paid offs/leave/vacation and other unplanned leaves such as sick leave and to some extent, maternity leave must also be granted.

The nurse manager/supervisor manages all these whiles balancing it with adequate staff flow per every shift for proper functioning of the ward/unit and patient care.

This makes projecting staffing needs: including daily, weekly or monthly staffing needs per departments (while balancing that with holidays and unplanned offs such as sick leave) and proper planning of employee annual leave (while avoiding future constraints) a huge challenge for most nurse managers and supervisors. Due to this, many nursing departments face 'piled leave and holidays' yet to be granted to their staff whereas others face periodic shortage of staff due to over-granting of employee leave (more than what the department can bear).

The AGOS Chart is a simple chart that has come to solve all these challenges. It is meant to guide nurse managers/supervisors and other human resource managers of large organizations to project and plan their staffing needs. For every number of staff available at every unit or departments, the chart is able to predict the following

- The number of staff that needs to be available for work (for timetable planning for the day, week, month, or year).
- The minimum number of staff that needs to be assigned to work daily.
- The number of staff that needs to be always on leave.

It was developed from the following formulae

1. Number of staff to report to work per day (A)

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$$A = \left(\frac{Z(de - f - g)}{cd} \right) - 1$$

2. Actual Number of Staff That Must Always be Available For Work (U)

$$U = \left(\frac{Acd}{de - f} \right) + 0.8$$

For technical details on the formulae, kindly send a mail to assandohmensah@gmail.com

HOW TO USE THE CHART

This chart was developed with the following assumptions

- The organization must work all year round
- The organization must work on holidays and weekends
- The number of legal holidays is 13
- The number of working days per staff per week is 5days

However, the chart did not take into consideration unplanned long leave such as maternity leave

The chart group staff by their leave days entitlement and determines the following

- The number of staff that needs to be available for work (for timetable planning for the day, week, month or year). ***This is designated by 'U' on the chart.***
- The minimum number of staff that needs to be assigned to work daily. This is designated by 'A' on the chart
- The number of staff that needs to be always on leave. This is designated by 'V' on the chart.

For instance, if a particular ward has 12 Registered Nurses (leave is 36days) and 7 Ward Assistants (leave is 28days), the AGOS chart shows that

For Registered Nurses, 9 should always be available to work, 6 should be assigned daily to work and 3 must always be on leave.

For Ward Assistants, 5 should always be available to work, 3 should be assigned to work daily 2 must always be on leave.

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Find Chart Below

Entitled Leave Days		28	32	36	40
Total Number of Staff at Department					
3	U	2	2	2	2
	A	1	1	1	1
	V	1	1	1	1
4	U	3	3	3	2
	A	1	1	1	1
	V	1	1	1	2
5	U	4	4	3	3
	A	2	2	2	2
	V	1	1	2	2
6	U	4	4	4	4
	A	2	2	2	2
	V	2	2	2	2
7	U	5	5	5	5
	A	3	3	3	3
	V	2	2	2	2
8	U	6	6	6	5
	A	4	4	3	3
	V	2	2	2	3
9	U	7	7	7	6
	A	4	4	4	4
	V	2	2	2	3
10	U	8	8	7	7
	A	5	5	4	4
	V	2	2	3	3

Key: *U* = The total number of staff that must be available for drafting of timetable; *A* = The number of staff that must be assigned to work daily; *V* = The number of staff that must always be on leave

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Entitled Leave Days		28	32	36	40
Total Number of Staff at Department					
11	U	8	8	8	8
	A	5	5	5	5
	V	3	3	3	3
12	U	9	9	9	9
	A	6	6	6	5
	V	3	3	3	3
13	U	10	10	10	9
	A	6	6	6	6
	V	3	3	3	4
14	U	11	11	11	10
	A	7	7	7	6
	V	3	3	3	4
15	U	12	12	11	11
	A	8	7	7	7
	V	3	3	4	4
16	U	13	13	12	12
	A	8	8	8	7
	V	3	3	4	4
17	U	14	13	13	12
	A	9	9	8	8
	V	3	4	4	5
18	U	14	14	14	13
	A	9	9	9	8
	V	4	4	4	5
19	U	15	15	14	14
	A	10	10	9	9
	V	4	4	5	5
20	U	16	16	15	15
	A	10	10	10	9
	V	4	4	5	5

Key: *U* = The total number of staff that must be available for drafting of timetable; *A* = The number of staff that must be assigned to work daily; *V* = The number of staff that must always be on leave

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Entitled Leave Days		28	32	36	40
Total Number of Staff at Department					
21	U	17	17	16	15
	A	11	11	10	10
	V	4	4	5	6
22	U	18	18	17	16
	A	12	11	11	10
	V	4	4	5	6
23	U	19	18	18	17
	A	12	12	11	11
	V	4	5	5	6
24	U	20	19	18	18
	A	13	12	12	11
	V	4	5	6	6
25	U	20	20	19	18
	A	13	13	13	12
	V	5	5	6	7
26	U	21	21	20	19
	A	14	14	13	12
	V	5	5	6	7
27	U	22	22	21	20
	A	14	14	14	13
	V	5	5	6	7
28	U	23	22	22	21
	A	15	15	14	14
	V	5	6	6	7
29	U	24	23	22	22
	A	16	15	15	14
	V	5	6	7	7
	U	25	24	23	22
	A	16	16	15	15

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30	V	5	6	7	8
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Entitled Leave Days		28	32	36	40
Total Number of Staff at Department					
31	U	26	25	24	23
	A	17	16	16	15
	V	5	6	7	8
32	U	26	26	25	24
	A	17	17	16	16
	V	6	6	7	8
33	U	27	27	26	25
	A	18	18	17	16
	V	6	6	7	8
34	U	28	27	26	25
	A	18	18	17	17
	V	6	7	8	9
35	U	29	28	27	26
	A	19	19	18	17
	V	6	7	8	9
36	U	30	29	28	27
	A	20	19	18	18
	V	6	7	8	9
37	U	31	30	29	28
	A	20	20	19	18
	V	6	7	8	9
38	U	32	31	30	28
	A	21	20	20	19
	V	6	7	8	10
39	U	32	32	30	29
	A	21	21	20	19
	V	7	7	9	10
40	U	33	32	31	30
	A	22	21	21	20
	V	7	8	9	10

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