



40 Mitchell Ave, Binghamton, NY 13903 Phone:(607) 723-1676

Patient Name: A Karri Beckwith

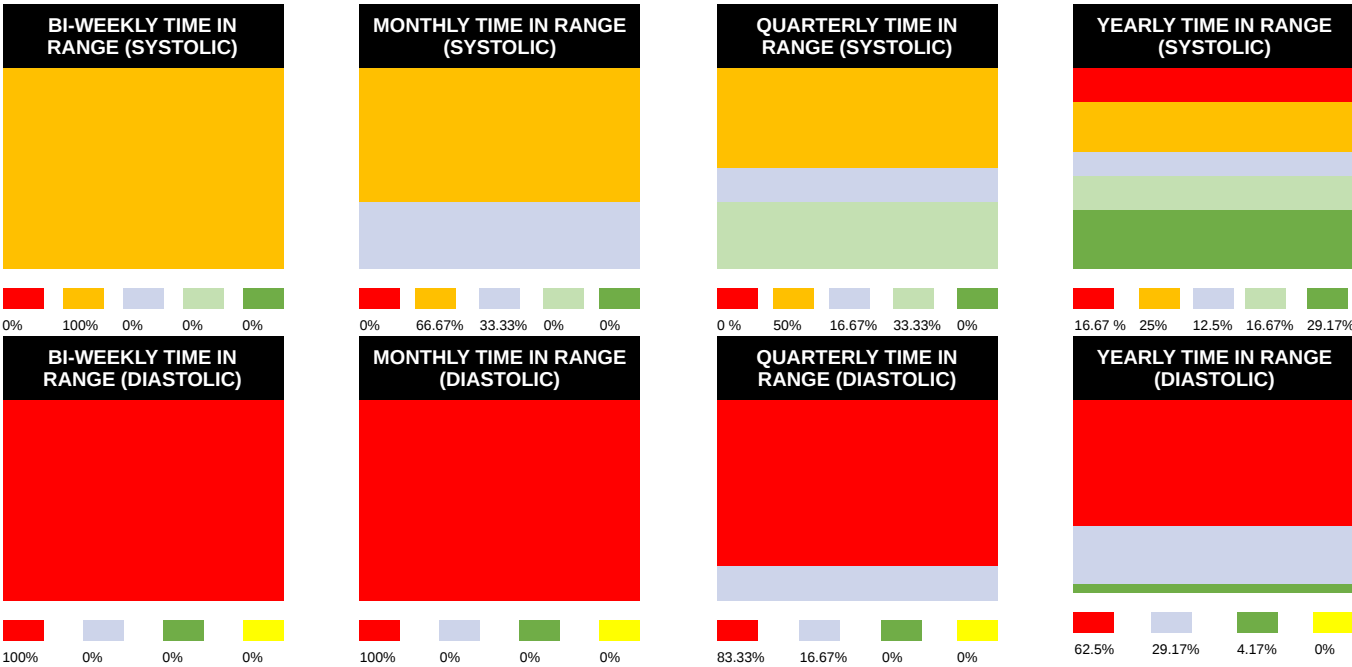
Height: 5.7

MRN #: 7836

Weight: 180

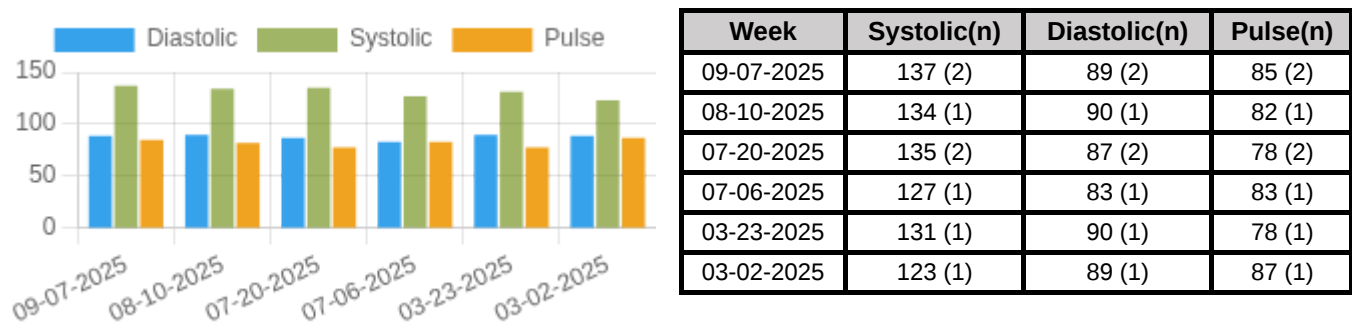
Birth Year:

Hypertension: S1



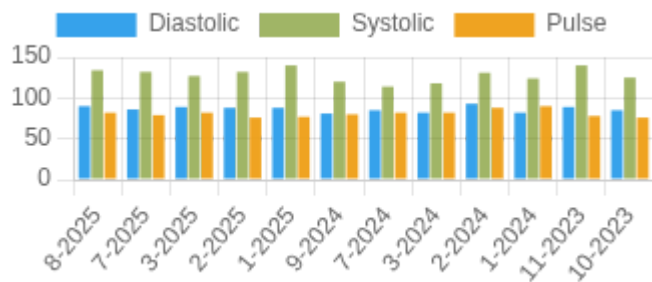
Blood Pressure Averages

Blood Pressure Averages: Weekly



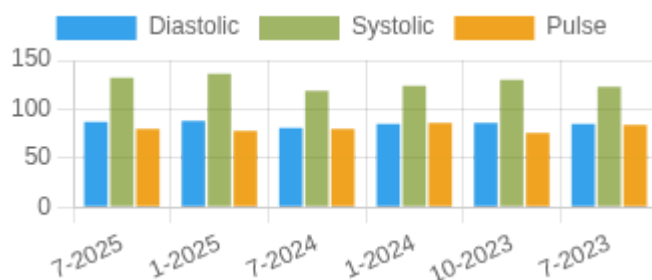
Blood Pressure Averages: Monthly

Month-Year	Systolic(n)	Diastolic(n)	Pulse(n)
8-2025	134 (1)	90 (1)	82 (1)
7-2025	132 (3)	86 (3)	79 (3)
3-2025	127 (2)	89 (2)	82 (2)
2-2025	132 (3)	88 (3)	76 (3)



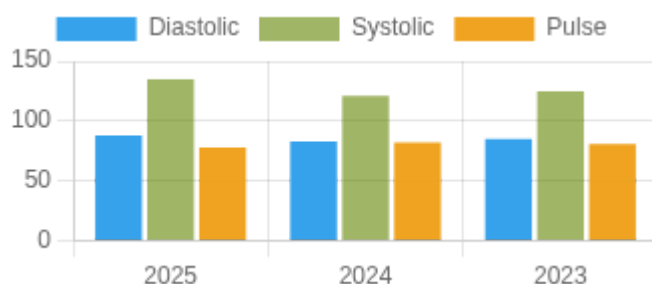
1-2025	140 (8)	88 (8)	77 (8)
9-2024	120 (5)	81 (5)	80 (5)
7-2024	114 (1)	85 (1)	82 (1)
3-2024	118 (1)	82 (1)	82 (1)
2-2024	131 (1)	93 (1)	88 (1)
1-2024	124 (1)	82 (1)	90 (1)
11-2023	140 (1)	89 (1)	78 (1)
10-2023	125 (2)	85 (2)	76 (2)

Blood Pressure Averages: Quarterly



Quarter-Year	Systolic(n)	Diastolic(n)	Pulse(n)
7-2025	132 (4)	87 (4)	80 (4)
1-2025	136 (13)	88 (13)	78 (13)
7-2024	119 (6)	81 (6)	80 (6)
1-2024	124 (3)	85 (3)	86 (3)
10-2023	130 (3)	86 (3)	76 (3)
7-2023	123 (3)	85 (3)	84 (3)

Blood Pressure Averages: Yearly



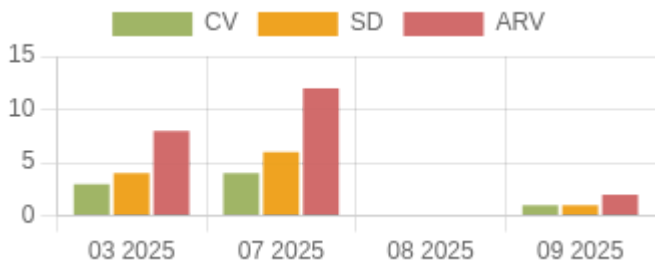
Year	Systolic(n)	Diastolic(n)	Pulse(n)
2025	135 (17)	88 (17)	78 (17)
2024	121 (9)	83 (9)	82 (9)
2023	125 (15)	85 (15)	81 (15)

Chat

Sender	Receiver	Messege	Date&Time
A Karri Beckwith	R.A. Ramanujan , M.D.	6073371489	09-09-2025
R.A. Ramanujan , M.D.	A Karri Beckwith	Need Fax #	09-09-2025
A Karri Beckwith	R.A. Ramanujan , M.D.	I have a primary care appt coming up would you please forward her my labs. Erica Rossi Bassett	09-09-2025
Mr. Anu Banerjee	A Karri Beckwith	Thank you for submitting your readings diligently and helping us take care of your health. Keep up the great work. We wanted to let you know that your recent customized PDF Report is now available from the app with your latest vital sign data. Thank you again.	18-08-2025
R.A. Ramanujan , M.D.	A Karri Beckwith	Please check with your PCP about Rx for watchPAT home device.	18-08-2025
A Karri Beckwith	R.A. Ramanujan , M.D.	ok sure I will	18-08-2025
R.A. Ramanujan ,	A Karri Beckwith	Just to build information to have insurance support your medications.	16-08-2025

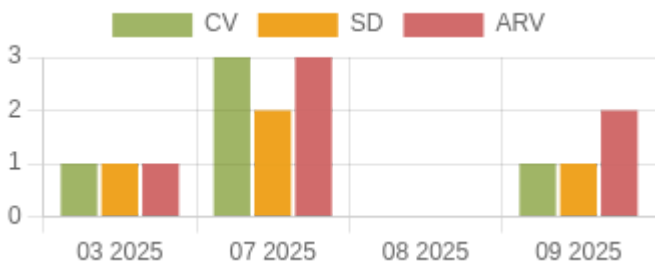
M.D.			
A Karri Beckwith	R.A. Ramanujan , M.D.	had not considered sleep test	16-08-2025
R.A. Ramanujan , M.D.	A Karri Beckwith	GM, So far not bad. Cholesterol little up. Thyroid is OK. More to come! Thyroid ultrasound is pending. Any ?? R U considering Sleep test at home ???	15-08-2025
A Karri Beckwith	R.A. Ramanujan , M.D.	my labs are in	14-08-2025
A Karri Beckwith	R.A. Ramanujan , M.D.	ty	04-08-2025
R.A. Ramanujan , M.D.	A Karri Beckwith	LAB and X-ray order sent.	04-08-2025
A Karri Beckwith	R.A. Ramanujan , M.D.	blood work we spoke about, ultra sound	03-08-2025
R.A. Ramanujan , M.D.	A Karri Beckwith	Please clarify what you mean by your orders.	03-08-2025

Systolic Variability Trends

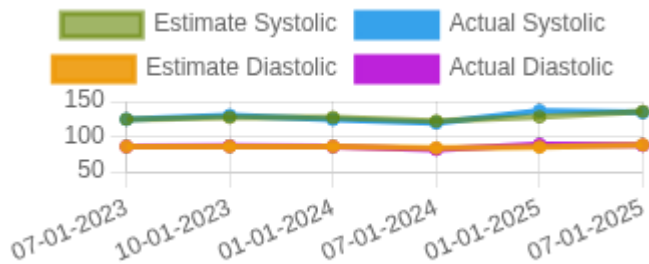


- 1. CV –The coefficient of variation (CV) is the ratio of the standard deviation to the mean. The higher the coefficient of variation, the greater the level of dispersion around the mean, Units = mmHg.
- 2. ARV – Average real variability (ARV) is a method for measuring short-term, reading-to-reading, within-subject variability. It is defined as the average of the absolute differences between consecutive readings, Units = mmHg.
- 3. SD – Standard deviation is a statistical measurement of variability. It measures how much variation there is from the average (mean), Units = mmHg.

Diastolic Variability Trends



Kalman Trends



1. **Mean(Arithmetic Mean)** – Mean is the average of a set of numbers

2. **SD** – Standard deviation is a statistical measurement of variability. It measures how much variation there is from the average (mean).

3. **V** - Variance determines the spread of numbers.. It measures how far each number in the set is from the mean (average) and from every other number in the set.

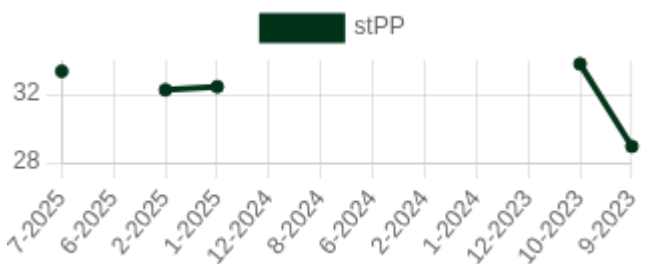
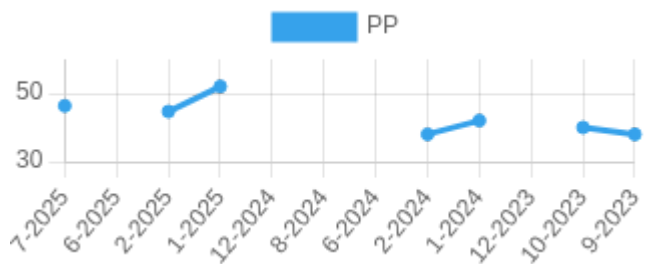
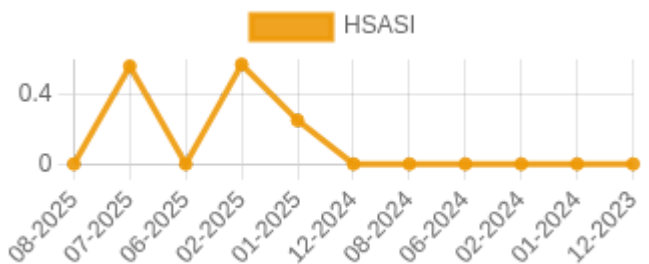
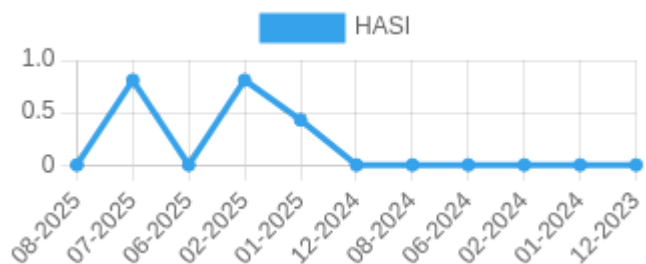
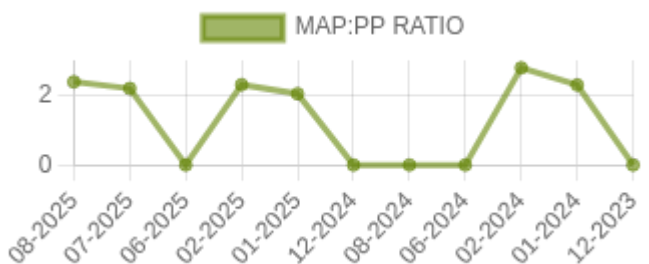
PSR

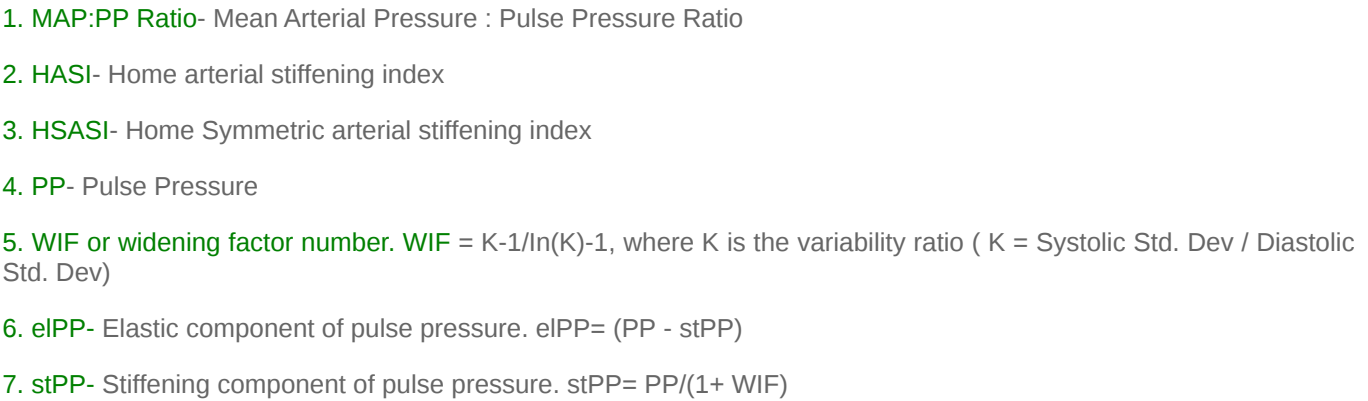


PSR: Pulse stiffening ratio (PSR) is the ratio between systolic and diastolic stiffness. It can be expressed as $PSR = \frac{[systolic\ stiffness]}{[diastolic\ stiffness]}$.

HbA1c Trends

Others Trends





Reference & Abbreviations

Guide to abbreviations and blood pressure, pulse and other Metrics.

HBPM -Home blood pressure measurement.	HBS -Home blood sugar
PP -Pulse pressure	AP -Average pulse
BPV -Blood pressure variability	SV -Systolic variability
DV -Diastolic variability	PV -Pulse variability
ARV -Average real variability	CV -Coefficient of variation %
SD -Standard deviation	MAP -Mean arterial blood pressure
MAP: PP Mean Arterial Pressure : Pulse Pressure	HASI -Home arterial stiffness index
HSASI -Home Symmetric arterial stiffness index	Estimated CO -Cardiac output [CO=(PPxHR)x.002]
PSR Pulse stiffening ratio. (PSR = SBP/DBP or slope of systolic BP/slope of diastolic BP)	

Estimated central blood pressure ECBP (ECBP = brachial MBP2/brachial DBP or ECBP = radial MBP2/radial DBP)

Normal Ranges.

Systolic BP 110 – 120 mm Hg

Diastolic BP 70 – 80 mmHg

Pulse 60 - 100/min

Pulse pressure (PP) 40 mmHg (Low PP less than 25% of the systolic BP and high PP greater than 100 mm Hg)

Normal stroke volume (SV) 60 -100 ml

Cardiac output (CO) SV x pulse rate/min

Estimate Cardiac output = Stroke volume / m

Blood pressure variability; Not defined in USA. But desirable ranges ESH guidelines; Systolic day time BP less than 15 mmHg and Diastolic less than 7.9 mmHg and Weighted SD less than 12.8 mmHg for systolic

Definitions.

MAP:PP ratio not defined.

Pulse stiffening ration; Not defined. Pulse pressure * inverse log (std. dev. systolic / std. dev. Diastolic) / (std. dev. systolic / std. dev. Diastolic) - 1 (Pulse pressure X ln (K)/(K-1) where K is systolic Sd /diastolic SD.)

Home arterial stiffness index; Not defined

Home arterial symmetric arterial index: Not defined.

Central blood pressure:Not defined

References.

MAP;
Chemla D, Antony I, Zamani K, Nitenberg A. Mean aortic pressure is the geometric mean of systolic and diastolic aortic pressure in resting humans. J Appl Physiol (1985). 2005 Dec;99(6):2278-84. doi: 10.1152/jappphysiol.00713.2005. Epub 2005 Jul 28. PMID: 16051709. Tien LYH, Morgan WH, Cringle SJ, Yu DY. Optimal Calculation of Mean Pressure From Pulse Pressure. Am J Hypertens. 2023 May 21;36(6):297-305. doi: 10.1093/ajh/hpad026. PMID: 36945835; PMCID: PMC10200551.

PSR:

Gavish B, Izzo JL Jr. Arterial Stiffness: Going a Step Beyond. Am J Hypertens. 2016 Nov 1;29(11):1223-1233. doi:

10.1093/ajh/hpw061. PMID: 27405964.

DCBP:

Chemla D, Millasseau S, Hamzaoui O, Teboul JL, Monnet X, Michard F, Jozwiak M. New Method to Estimate Central Systolic Blood Pressure From Peripheral Pressure: A Proof of Concept and Validation Study. *Front Cardiovasc Med*. 2021 Dec 15;8:772613. doi: 10.3389/fcvm.2021.772613. PMID: 34977186; PMCID: PMC8714848.

CO

Koenig J, Hill LK, Williams DP, Thayer JF. Estimating cardiac output from blood pressure and heart rate: the liljestrand& zander formula. *Biomed Sci Instrum*. 2015;51:85-90. PMID: 25996703; PMCID: PMC5317099.

BP

Mean arterial blood pressure;

Guidelines recommend less than 125 mmHg Poon LC, Shennan A, Hyett JA, Kapur A, Hadar E, Divakar H, McAuliffe F, da Silva Costa F, von Dadelszen P, McIntyre HD, Kihara AB, Di Renzo GC, Romero R, D'Alton M, Berghella V, Nicolaides KH, Hod M. The International Federation of Gynecology and Obstetrics (FIGO) initiative on pre-eclampsia: a pragmatic guide for first-trimester screening and prevention. *Int J*

GynaecolObstet 2019;

145(Suppl 1):1–33. Not defined in general (desirable MAP ,90 mm Hg) Melgarejo JD, Yang WY, Thijs L, Li Y, Asayama K, Hansen TW, Wei FF, Kikuya M, Ohkubo T, Dolan E, Stolarz-Skrzypek K, Huang QF, Tikhonoff V, Malyutina S, Casiglia E, Lind L, Sandoya E, Filipovský J, Gilis-Malinowska N, Narkiewicz K, Kawecka-Jaszcz K, Boggia J, Wang JG, Imai Y, Vanassche T, Verhamme P, Janssens S, O'Brien E, Maestre GE, Staessen JA, Zhang ZY; International Database on Ambulatory Blood Pressure in Relation to Cardiovascular Outcome Investigators*. Association of Fatal and Nonfatal Cardiovascular Outcomes With 24-Hour Mean Arterial Pressure. *Hypertension*. 2021 Jan;77(1):39-48

We hope these complementary multiparametric data along with standard set used in daily practice helps to understand home blood pressure trend and other information they may potentially generate in the future to understand medication effects and patient management.

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